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Assessment of Competency Status of Residential Mental Health Support Workers

A thesis presented in partial fulfilment of the requirements for the degree of Master of
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Niall Morrison

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Abstract

The present study explored the current competency status of residential mental health support workers ($n=121$). Competency was assessed through the domains of skills, attitudes and perception of the work environment. Consistent with a recovery model, the National Mental Health Workforce Development Coordinating Committee (1999) put forward 10 basic core competencies that they recommended that all mental health workers should be able to demonstrate in their work practice. Skills and attitudes self-report measures were developed to assess participant performance on these competencies. In addition, a standard measure (Ward Atmosphere Scale) was utilised to evaluate the perceived atmosphere of the participants' work environment. The aggregated results of this study appeared to show that participants were generally competent in a number of areas of work practice. However, deficiencies in critical areas of client support were identified on closer examination of the data. With regard to participants' reported skills, shortcomings were found in particular in the core competencies knowledge, assessment and intervention. Similar deficits were found regarding participant attitudes with shortcomings found in the core competencies knowledge, culturally appropriate practice, assessment and safe/ethical practice. While superior education and training did appear to influence performance on certain competencies, some deficiencies were nevertheless reported by the more highly educated and trained participants. In addition, participants generally characterised their work settings in a very negative manner such that it appears that many settings are not adhering to the philosophies of rehabilitation and recovery. Despite the identification of deficiencies, many participants did demonstrate a number of competencies combined with a commitment to professional growth. In fact, one of the most positive findings in this study was the importance practically all the participants placed on promotion of their own professional growth.

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Table of Contents

Abstract	i
Acknowledgements	ii
Contents	iii
Lists of tables and figures	viii
I Introduction	1
Deinstitutionalisation.....	1
Rehabilitation and recovery	7
Supported housing in the community	14
Mental Health Support Workers.....	21
The Competent Mental Health Support Worker.....	30
II Method	37
Ethical issues	37
Validity of competencies	37
Design and Instruments	41
Participants	51
Recruitment	52
Procedure	53
Plan of statistical analysis.....	53
III Results	55
Skills Assessment	55
Aggregation of skill scores	55
Specific skill core competency status of participants	58

Core Competency 1. Demonstrate knowledge and understanding of mental health, mental illness and mental health services.	58
Core Competency 2. Communicate effectively.....	60
Core Competency 3. Demonstrate culturally appropriate practice.....	62
Core Competency 4. Assess consumer health needs.....	64
Core Competency 5. Provide appropriate intervention for consumers.	66
Core Competency 6. Keep records in a clear concise and accurate format.	68
Core Competency 7. Practice safely and ethically.	69
Core Competency 8. Comply with legal responsibilities.	70
Core Competency 9. Promote the health and wellness of consumers, families and communities.	72
Core Competency 10. Promote individual professional growth.	74
Summary of correlational analysis of skills subscales	76
Attitude Assessment	77
Aggregation of attitude scores	77
Specific attitude core competency status of participants	80
Core Competency 1. Demonstrate knowledge and understanding of mental health, mental illness and mental health services.	80
Core Competency 2. Communicate effectively.....	82
Core Competency 3. Demonstrate culturally appropriate practice.....	85
Core Competency 4. Assess consumer health needs.....	86
Core Competency 5. Provide appropriate intervention for consumers.....	88
Core Competency 6. Keep records in a clear concise and accurate format.	90
Core Competency 7. Practice safely and ethically.	91
Core Competency 8. Comply with legal responsibilities.	92
Core Competency 9. Promote the health and wellness of consumers, families and communities.	94
Core Competency 10. Promote individual professional growth.	95

	Summary of correlational analysis of attitudes subscales	97
	Work Environment Assessment	98
	Summary of correlational analysis of work environment subscales	100
IV	Discussion	101
	Summary of major findings	101
	Skills Assessment	103
	Individual core competency scores	104
	Core Competency 1. Demonstrate knowledge and understanding of mental health, mental illness and mental health services	105
	Core Competency 2. Communicate effectively	106
	Core Competency 3. Demonstrate culturally appropriate Practice	106
	Core Competency 4. Assess consumer health needs	107
	Core Competency 5. Provide appropriate intervention for consumers.	108
	Core Competency 6. Keep records in a clear concise and accurate format.	109
	Core Competency 7. Practice safely and ethically.	110
	Core Competency 8. Comply with legal responsibilities.	110
	Core Competency 9. Promote the health and wellness of consumers, families and communities	111
	Core Competency 10. Promote individual professional growth	112
	Summary of skills core competencies	112
	Attitudes assessment	114

Individual core competency scores	116
Core Competency 1. Demonstrate knowledge and understanding of mental health, mental illness and mental health services.....	116
Core Competency 2. Communicate effectively.....	117
Core Competency 3. Demonstrate culturally appropriate practice.....	118
Core Competency 4. Assess consumer health needs.....	119
Core Competency 5. Provide appropriate intervention for consumers.....	120
Core Competency 6. Keep records in a clear concise and accurate format.....	121
Core Competency 7. Practice safely and ethically.	121
Core Competency 8. Comply with legal responsibilities.	122
Core Competency 9. Promote the health and wellness of consumers, families and communities.	122
Core Competency 10. Promote individual professional growth.....	123
Summary of attitudes core competencies	123
Work Environment	125
Relationship Dimensions.....	125
Personal Growth Dimensions	126
System Maintenance Dimensions.....	126
Conclusions	128
Summary of competency assessment	128
Appropriateness of competencies	129
Limitations of the study	131
Suggestions for future research	132
General Comment.....	133
V References	135
VI Appendices	147
Appendix A. -National Mental Health workforce Development Coordinating Committee (1999) core competencies and performance criteria.....	147
Appendix B. - Massey University Ethics Committee Approval.	151
Appendix C. - Information sheet (1).....	153

Appendix D. - Information sheet (2).	154
Appendix E. - Job Description and Competency Index Sources.....	156
Appendix F. - Skills and attitudes survey.....	159
Appendix G. - Demographic Information.	169
Appendix H. - Providers and numbers of support workers.	174
Appendix I. - Item frequency scores.....	177
Appendix J. - Results of correlational analysis.	189

List of Tables and Figures

Tables

Table 1

Core competency presence identification scores from the 30 documents of job descriptions and recommended competency lists40

Table 2

Adapted WAS Subscale and Dimension Description.....50

Table 3.

Comparison of mean scores on skills aggregate measure using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on aggregated skill scale57

Table 4

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 158

Table 5

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 2.....61

Table 6

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 3.62

Table 7

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 464

Table 8

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 5..... 66

Table 9

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 6..... 68

Table 10

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 7..... 70

Table 11

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 8..... 71

Table 12

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 9..... 73

Table 13

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 10..... 75

Table 14

Comparison of mean scores on skills aggregate measure using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on aggregated attitude scale..... 79

Table 15

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 1.....80

Table 16

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 2.....83

Table 17

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 3.....85

Table 18

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 4.....87

Table 19

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 5.88

Table 20

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 6.....90

Table 21

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 7.....91

Table 22

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 8..... 93

Table 23

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 9..... 94

Table 24

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 10..... 96

Table 25

Ward Atmosphere Subscale Descriptive Statistics. 98

Figures.Figure 1

Domains of competence 36

Figure 2

Frequency of aggregated skill scores of participants..... 56

Figure 3

Frequency of aggregated attitude scores of participants..... 78

Figure 4

WAS scores from U.S.A., U.K. and N.Z. samples
..... 99

Introduction

This introduction provides a history of the development of the policies and practices that have influenced changes in the role of the mental health support worker in the care of the mentally disabled. The policies of deinstitutionalisation and care in the community and the adoption of the approaches of rehabilitation and recovery have elevated the support worker's role from that of a 'bit-player' to a key member of the mental health workforce. Such a role can now better facilitate positive outcomes for the mentally disabled individual. The specific role these workers are expected to play in client support is examined with a view to assessing the current competency status of the New Zealand residential mental health support worker.

Deinstitutionalisation

The provision of care for the mentally ill in New Zealand has undergone profound change in the past fifty years mirroring a trend in the English-speaking Western world. The locus of treatment has moved from the institutional environment to a community environment. The rationale for this phenomenon- commonly referred to as deinstitutionalisation, where psychiatric hospitals are closed or reduced and patients moved to the community- has been the subject of much debate. The development of new drugs, concerns that institutional care was actually anti-therapeutic and detrimental to patient's wellbeing, and economic reasons have all been cited as the driving forces behind this trend (Busfield, 1997).

The explanation commonly given by the medical profession for the change in policy was the development and use of powerful psychoactive medication in the 1950s. This facilitated both the treatment of patients outside the hospital environment and the early discharge of patients from the psychiatric hospital to the community where drug treatment could be continued (Haines & Abbott, 1984). This view has been the subject of dispute as resident populations in psychiatric hospitals in both the U.S.A.

and the U.K. were in decline from 1950 onwards whereas these new drugs were only introduced in the mid 1950s (Scull, 1984).

Another reason often advanced for the policies of deinstitutionalisation was concerns about the efficacy of treatment in psychiatric hospitals. These concerns were expressed both from a therapeutic and humanitarian viewpoint. It was suggested that the impact of the institutional environment on patients was more in some instances the cause of problems rather than any intrapsychic forces (Goffman, 1961 in Scull, 1984). The result was patients becoming institutionalised and losing their place in society. In addition, claims of coercive staff-patient relations including physical assaults on patients and rough handling were reported (Barton 1959, in Pilgrim and Johnson, 1997). The premise here was that this type of behaviour actually created rather than solved problems (i.e., iatrogenesis).

A related explanation for the introduction of deinstitutionalisation is that offered by Busfield (1997). She proposed that it was the adoption of a new model of care that included wide ranging services and facilities outside hospital settings that prompted the opening of hospital doors. This new model of care recognized the deficiencies of the psychiatric hospital as a therapeutic environment as well as the benefits of new medications and other therapies. When coupled with the planned introduction of community based state funded facilities, this model made the use of institutions increasingly redundant. Busfield's (1997) explanation of a move away from hospitalisation is supported by two Royal Commission reports in Britain in 1926 and 1930 where the term 'community care' was first used (Carrier & Kendall, 1997). Both of these reports recommended greater use of facilities in the community for caring for the mentally ill. Considering that deinstitutionalisation did not become the policy of choice until the 1950s, it is interesting to note that the proposal of this new model of care in the community was under consideration at least twenty years earlier in Britain and well before the development of new drug treatments.

Scull (1984) proposed an alternative view for the policy of deinstitutionalisation-one that challenged the humanitarian and therapeutic nature of the previous explanations. He suggested that the over-riding concern of policy makers was one of economics rather than any burning desire to enhance the quality of life for psychiatric patients.

Whatever the reasons, be they medical, humanitarian, economic or the adoption of a new model of care, the policy of deinstitutionalisation was bound to be implemented given that it satisfied both the ideologies of fiscal and social reformers—two most unlikely bedfellows, that were, in a sense, united in a common cause (Bachrach, 1997). Throughout the U.S.A. and U.K. from the 1950s onwards, the result was a dramatic reduction in the numbers of long stay patients in psychiatric hospitals. Policy statements in the U.S.A. have described the deinstitutionalisation process as having three distinct facets (Bachrach, 1997). First, there is the release of patients from the hospital to alternative facilities located in the community. Second, potential new patients are prevented or diverted from entering the hospitals. Lastly, care would take place in the community through the development of specialised programs specially tailored to meet the requirements of these now noninstitutionalised patients. It is important to note that the definition of deinstitutionalisation includes reference to aftercare in the community following a patient's departure from the psychiatric hospital.

With all the rhetoric espousing the benefits of returning patients to the community, there was remarkably little planning done to cope with such an influx of people. In the U.S.A. and the U.K., the proposed new programmes remained “figments of planner's imaginations” (Scull, 1983, p338). The American and British experiences with deinstitutionalisation have generated a vast quantity of literature assessing both the merits and problems that accompanied this shift. The American experience showed great success in reducing hospital numbers with a drop of 86 per cent since 1955. In addition, this move has led to the blocking of many would be admissions to these hospitals (Bachrach, 1997). Unfortunately, the third part of the planned policy-planned special programs—has not proceeded at anything near an equivalent rate.

The lack of facilities in the community was followed by a sharp increase in admissions to psychiatric hospitals over the same period in cases with little or no support in the community. Many discharged patients found themselves living in nursing homes (that in some cases had much worse standards than the institutions), board or care homes, and welfare hotels (Scull, 1983). Most of this accommodation was located in the poorer parts of large American cities often located alongside similar establishments. One particular street in Detroit had 165 residences for ex-

patients-a situation that could not be described as reintegrating these individuals back into the community. Other ex-patients found themselves on 'skid row', living in alleyways and subways and many have ended up in prison. The latter phenomenon where mentally disabled individuals are shunted from the mental health system into the criminal justice system is known as transinstitutionalisation (Trieman, 1997). This situation was one anticipated by commentators at the time (e.g. Titmuss, 1976). While applauding the move away from the institutions, he also noted that care of the mentally ill was being moved "from trained staff to untrained or ill-equipped staff or no staff at all" (Titmuss, 1976, p.109).

While painting such a bleak picture of the American experience, it must be stressed that deinstitutionalisation was a positive experience for some ex-patients. Many were able to cope with independent living, gaining employment and attaining a degree of normalization in their lives (Bachrach, 1997). Currently, in the U.S.A., while there is much greater use of psychiatric facilities, most admissions are to outpatient services (Abbott, 1985). For many ex-patients (i.e. those with less serious disabilities), the psychiatric hospital was an inappropriate arena for their care and their equivalents today can in some instances reap the benefits of deinstitutionalisation.

On the other hand, even though there has been some success, there is one group of people that this policy has generally failed worldwide: those individuals who suffer from chronic and debilitating levels of mental disorder. This group includes both older former patients and younger never institutionalised people. It is the chronic mentally disabled individual that is over-represented in the poor quality accommodations or amongst the homeless populations. This group is the very visible reminder of what happens when the substitution of specialized community care for hospital care has not occurred. These individuals have been consistently ignored unless an individual's crisis has demanded the attention of the mental health services. With a general lack of aftercare, one sees these same individuals continually returning for short-stays at hospitals before returning in the interim to the community-a phenomenon known as the 'revolving door' syndrome (Talbot, 1980).

In New Zealand, the pattern of decreasing resident population numbers in psychiatric hospitals coupled with increased readmissions has also been evident although not as

dramatic as in the U.S.A. By 1985, the numbers in hospitals had halved but there were wide regional variations with little movement in some hospitals while others such as Carrington in Auckland showing a reduction of 75 per cent (Abbott, 1985). The reduction in New Zealand is due mainly to the fact that hospital patients stay for much shorter periods in hospital but, consistent with overseas trends, are also much more likely to be readmitted again at some later date (Haines & Abbott, 1984). The problems seen in the U.S.A. with lack of aftercare for the chronically disabled were anticipated in New Zealand. However, despite these advanced warnings, deinstitutionalisation proceeded here without the necessary funding required to build up community resources for this group of patients (Abbott, 1985).

Abbott (1985) commented on the perils of this policy describing it as heading “on a disaster course as far as the most severely disabled and their families are concerned” (p.9). His fears were not without foundation when one looks through the recent archives of the popular media in New Zealand. Maling (2000) reported the findings of a survey showing that up to 33 per cent of severely mentally disabled individuals in the greater Wellington area had difficulties finding or keeping accommodation. Some accommodation lacked water and electricity and about 5 per cent of individuals were having difficulty getting enough food to eat. Subsequent articles have reported 20 to 30 per cent of this population living ‘rough’ in Wellington, with hundreds of others living in boarding houses or even sleeping on floors (Sharpe, 2000). High profile cases where mentally ill individuals have committed serious crimes have led to some politicians querying the policy of deinstitutionalisation and calling for custodial care for those who are severely psychotic and disabled (Petrovic, 1988).

On the face of it, the policy of deinstitutionalisation is an enlightened one where psychiatric patients can return to the community and assume control over and take responsibility for their own lives. History shows that psychiatric institutions were built following an outcry by reformers at the state of care for mentally ill individuals in the community (Bean & Mounser, 1993). It was the belief promoted for both therapeutic and humanitarian reasons that these institutions provided the optimum environment for the care of the mentally ill. It is these self-same reasons that were offered for the return of mentally ill patients to the community.

For the proponents of this policy, the movement of patients from hospitals to the community was underwritten by the belief that this change of location would lead to more rapid recovery and attainment of a healthy and productive lifestyle. This belief was, as history now shows, overly optimistic and not based on any empirical evidence. Ironically, ex-patients often now suffer from a lack of services and care, only this time in the community (Falloon & Fadden, 1993). For the chronically disabled, the risks of relapse or an increased disability are very apparent when their progress in the community (that has no day or residential facilities) has been followed up. Leff and Vaughan (1972) found that one third of people who had previously been admitted to the psychiatric hospital for schizophrenia or manic-depressive psychoses had major problems with housing and social difficulties. Supporters of deinstitutionalisation appear to have viewed the 'community' as somewhere that would openly embrace the recently released patients and facilitate their reintegration by an abundance of warmth and understanding (Falloon & Fadden, 1993).

The reality of the community is somewhat different for the mentally disabled. It is difficult enough for an individual with no disability to cope with the vagaries of life in a new urban environment. Finding a job, a house to live, and making friends are all part of successful living in the community. An unsupported individual with a serious mental disability can find the community a very unforgiving place. The move from a hospital where basic needs such as food and clean laundry are provided to accommodation where one has now to cook for oneself, take care of bills and so forth, while still coping with one's disability is no doubt a huge challenge. The general public's generally negative attitude to the severely mentally disabled individual living alongside them will also have a major impact on that individual's quality of life and ability to adjust.

The enlightened view of care in the community in the 1950s and 1960s has now been somewhat replaced by a hardening of attitudes when the shortcomings of the policy are made visible by the news media. In Britain, the mentally disabled are almost always referred to in the news media in a negative light (Barnes, 1993). Individuals who suffer from a psychotic illness such as schizophrenia are often portrayed as violent, dangerous criminals, while those who had a non-psychotic disorder were presented as figures of fun to be laughed at or pitied. Other studies have found the

media focus headlines on negative aspects such as violent episodes while relegating any sympathetic or supporting reports to the back pages (Philo, 1994). This trend is also apparent in the New Zealand media with great prominence given to recent incidents where severely mentally disabled individuals have committed violent crimes. The graphic details of Lesley Parr's murder of his girlfriend, which included her decapitation, provide a graphic example of this sensational reporting (Maxwell, 1999). This often unbalanced reporting can lead to public opinion swinging back towards supporting increased levels of institutional care. The immediate impact on the mentally disordered individual living in the community trying to build a social network or obtain employment would obviously not be helpful.

This mainly negative focus on the shortcomings of the deinstitutionalisation policy for chronically mentally disordered is necessary as while the intention may have been good, the results were often less than expected. However, the picture has not been as completely bleak as may be implied in this section. Health professionals have learned from mistakes made, and some innovative projects that have showed promising outcomes are now in place. These developments will be discussed in more detail in upcoming sections, starting with a look at the rehabilitation and recovery approaches.

Rehabilitation and Recovery

The task of rehabilitating the chronic mentally disabled individual in the community was not considered an essential service in the early stages of deinstitutionalisation (Anthony, 1996). Additionally, lack of knowledge about what actually constituted rehabilitation hindered the process in the first instance. The use of the traditional medical model, which viewed rehabilitation in terms of symptom reduction, initially guided how such services were delivered to the individual, (Anthony, Kennard, O'Brien & Forbess, 1986). However, there was an increasing realization that the use of medication and the accompanying decrease in symptomatology did not equate to an individual's ability to function successfully in the community environment.

Despite the awareness of the limitations of the medical model, initial alternative approaches to rehabilitating the psychiatrically disabled were also generally

characterised by less than successful outcomes (Lamb, 1976). Many programmes for the psychiatrically disabled were described as having a rehabilitative focus but in reality differed little from traditional inpatient treatments in the psychiatric hospitals (Anthony, Cohen & Farkas, 1982). In addition, for those programmes that did find some success, there was often a tendency to select those individuals who had the best chance of a positive outcome. Of course, such a policy denied the most needy of opportunities that could be of benefit (Lamb, 1976).

The lack of successful integration of this particular group of people has been prolonged by an adherence to certain beliefs that has done much to retard progress in this field. Anthony et al. (1986, p.251) outlined fifteen historical myths that have hindered the development of effective psychiatric rehabilitation programmes in the community setting:

“

1. Increasing drug treatment compliance can singularly effect rehabilitation outcome.
2. The majority of psychiatrically disabled persons are being successfully rehabilitated.
3. Traditional types of inpatient treatment, such as psychotherapy, group therapy, and drug therapy, positively effect rehabilitation outcome.
4. Total push inpatient therapies, such as milieu therapy, token economies and attitude therapy, positively effect rehabilitation outcome.
5. Hospital based work therapy positively effects employment outcome.
6. Time limited community based treatment is superior to hospital based treatment in terms of rehabilitation outcomes.
7. Community based treatment settings are well utilized by persons who are psychiatrically disabled.
8. Where a person is treated is more important than how a person is treated.
9. Psychiatric symptomatology is highly correlated with future rehabilitation outcome.
10. A person's diagnostic label provides significant information relevant to a person's future rehabilitation outcome.
11. There is a strong correlation between a person's symptomatology and a person's skills.
12. A person's ability to function in one particular environment (e.g., a community setting) is predictive of a person's ability to function in a different type of environment (e.g., a work setting).
13. Rehabilitation outcome can be accurately predicted by professionals.
14. A person's rehabilitation outcome is a function of the credentials of the mental health professional with whom the person interacts.
15. There is a positive relationship between rehabilitation outcome and the cost of the intervention.

”

It is unfortunate that the research that dispelled the veracity of these beliefs was carried out mostly in the 1960s and the early 1970s. Yet it is only in the last two decades that this knowledge has filtered down and appears to be applied more often to practice (Anthony et al, 1986).

Nevertheless, given that the concept of rehabilitation has suffered from differing definitions, there has been a lack of consensus historically about what should be the essential components of the process. Professionals in this relatively new field had to look beyond traditional interventions and develop alternative frameworks. A new approach to psychiatric rehabilitation was first posited by Carkhuff's (1969) common sense suggestion of training clients to acquire the requisite skills needed to function in the community.

From such initial suggestions, the focus in rehabilitating the psychiatrically disabled individual has shifted away from a singular focus on the client's symptomatology and diagnosis. Most models currently now frame rehabilitation as coping with the consequences of having a disability. Thus, as in physical rehabilitation, the practice of psychiatric or psychosocial rehabilitation now concentrates on assisting the client (versus the 'patient') to build or develop the skills and abilities so that they can live and work successfully in a community-based environment (Anthony & Nemeo, 1984). The mission in rehabilitation currently is aimed at reintegrating the individual into the community by helping them develop strategies to function adaptively in this environment. Not only does this include the idea of client skill development, it also focuses on strengthening the support systems for the client in the community (Anthony, Cohen & Farkas 1999).

The delivery of this form of rehabilitation was not generally considered an essential component of community mental health care until the 1980s (Anthony, Cohen & Farkas, 1988). As mentioned earlier, the gradual acceptance across the mental health field of the need for these types of services was due to the realization that the chronically mentally disabled were often not faring successfully in the community. The challenge was to develop a coherent and structured approach that professionals and carers could implement to achieve the desired outcomes for the clients.

The development of current rehabilitation strategies owes much to the errors made by previous providers of these services. Using the idea of failure as constructive, the new approaches are now better placed to avoid the same pitfalls that were encountered before in the initial rush to open the hospital doors. A set of guiding principles that governs the practice of current models of psychiatric rehabilitation have been put forward. These are designed to be adhered to independent of specific setting and independent of the discipline of the individual practicing them (Anthony, Cohen & Farkas, 1990, in Curtis, 1997, p.10):

“

- The primary focus of psychiatric rehabilitation is on improving the competencies of persons with psychiatric disabilities.

- The benefits of psychiatric rehabilitation for clients are behavioural improvement in their environment of need.
- Psychiatric rehabilitation is eclectic in the use of a variety of techniques.
- A central focus of psychiatric rehabilitation is on improving vocational outcomes for persons with psychiatric disabilities.
- Hope is an essential ingredient of the rehabilitation process.
- The deliberate increase in client dependency can lead to an eventual increase in client's independent functioning.
- The fundamental interventions of psychiatric rehabilitation are development of client skills and development of environment supports.
- Long-term drug treatment is often necessary but rarely sufficient component of a rehabilitation program.

”

The principles here were modelled on the physical rehabilitation approach and then tailored towards the specific needs of the psychiatrically disabled client. This approach has provided a unifying template for practice with this population and was based on empirical foundations. The literature showed that rehabilitation outcome for these clients was associated most strongly with developing client skills and environmental supports (Anthony & Nemeec, 1984). The desirable outcomes of psychiatric rehabilitation governed by the practice of these principles (Curtis, 1997, p.10), include the following:

“

- Reduced hospitalisations re-admissions, lengths of stay and other measures of hospital utilization;
- Positive gains in employment status;
- Skill development in cognitive, emotional, social, and physical skills;
- Client satisfaction;
- Stability in accommodation;
- Improvements in perceptions of quality of life.

”

The value of these guidelines and outcome goals has been useful in assessing whether programmes that claim to have a rehabilitation focus are actually providing such a service. The principles coupled with outcome parameters have allowed the further development of ten essential ingredients of a rehabilitation program (Anthony et al, 1982, p.18):

“

1. Functional assessment of client skills in relation to environmental demands.
2. Client involvement in the rehabilitation assessment and intervention stages.
3. Systematic individual client rehabilitation plans.
4. Direct teaching of skills to clients.

5. Environmental assessment and modification.
6. Follow-up of clients in their real-life environments.
7. A rehabilitation team approach.
8. A rehabilitation team referral.
9. Evaluation of observable outcomes and utilization of evaluation results.
10. Consumer involvement in policy and planning.

”

The beauty of these ingredients is that they are all amenable to observation, monitoring, and measurement. This allows one to determine the extent to which a program is ‘rehabilitative’ for a client and also better allows for replication where successful outcomes are achieved. The rationale is that the greater the number of these ingredients in a programme, the more potential it has to function as an optimal rehabilitation setting (Anthony & Nemeč, 1984).

The move away from treating the illness itself to treating its consequences has provided a much greater insight into the challenges facing an individual with a severe mental disorder. The World Health Organization provided support to this change in focus with its reclassification of its illness model (Wood 1980). In addition to symptomatology, the consequences of illness-impairment, disability, and handicap were also included. This move provided specialists in the still new field of psychiatric rehabilitation with an opportunity to promote a new vision of service for the mentally disordered - that of promoting an individual’s recovery from a mental disability (Anthony, 1993).

The concept of recovery from mental illness grew from the real life experiences of mentally disabled individuals as they faced up to the challenge of their disability (Deegan, 1988). Ex-patients, known as consumers and clients in current models, began to articulate what the reality of being mentally disabled is like. They also began to relate their experiences with traditional mental health services. Rehabilitation had provided an overall template for service delivery to the mentally disabled but is quite useless unless the individual engages in the process. It is active engagement in this course of action that initiates the recovery process for the individual concerned.

Recovery has also been conceptualised as a ‘role-reclamation’ process, where the individual reclaims their identity shifting from ‘the sick person’ to that of an individual who can resume and embrace the similar roles of their peers in the

community (Mead, personal communication, in Curtis, 1997). Deegan (personal communication, in Curtis, 1997) describes recovery as something that emerges from the individual in overcoming their disability and achieving their aspirations to participate like others in their community. Recovery has also been depicted as a growing process beyond having a mental disability to development of new meanings and purposes in life (Weisburg, 1994 in Curtis, 1997). All of these descriptions involve the idea of achieving wellness in their own and other's eyes.

A difficulty in trying to define this process is precisely due to the fact that recovery for any given individual has so many dimensions. It includes recovering from the illness, from personal stigma, from negative personal experiences and the other, sometime catastrophic impacts of a severe mental illness (Anthony, 1993). Although one can measure a number of facets of the process, the concept as a whole is probably immeasurable due to the subjective nature of each individual's unique approach to his or her recovery.

The use of the recovery vision has been nothing less than a godsend for the mentally disabled as they often despaired of any positive change in their lives. They were regularly told that they had an incurable condition, that medication was their only option and that symptoms would inevitably get progressively worse (Mead & Copeland, 2000). The use of the word 'recovery' has provided individuals with an alternative view of their future. This new outlook involves wellness, empowerment, hope and helping oneself rather than relying exclusively on mental health professionals. It means that while one's symptoms may never disappear, one may still live well in spite of them.

It has been the experiences of consumers that has driven the application of the recovery approach. Too long a silent group, they have become much more vocal in their demands for appropriate services. They are sharing information, becoming aware of their rights and querying the status quo. The relationship between the mentally disabled person and the mental health professional has historically been one where the professional holds the power. The recovery approach emphasises collaboration between the two rather than simple compliance with the professional's opinions (Lehman, 2000). The mentally disabled individual has a greater insight into what

constitutes wellness for themselves, bringing much information that has been hitherto overlooked. The consumer's subjective experiences of having a mental disability, and its accompanying consequences, are now being taken into account by increasing numbers of professionals.

Consumers have emphasised several key facets that are essential to the recovery process for them (Mead & Copeland, 2000). They include unlimited hope, personal responsibility, peer support, education and advocating for themselves. Mental health planners have begun to take into account such consumer views in their design of appropriate services for mentally disabled individuals. The recovery approach is the one of choice in New Zealand (National Mental Health Workforce Development Coordinating Committee, NMHWDC, 1999). One would hope that its impact can be seen in the change in focus in how mental health services should be delivered to consumers.

Supported Housing in the Community

The advent of care in the community led to a plethora of services for the mentally disabled. However, it was not until the early 1980s that mental health planners began to conceptualise exactly what type of services were needed and how to implement them (Carling, 1993). The growing acceptance of the rehabilitation and recovery approaches changed both the quality and nature of care for the mentally disabled in the community. One of the structures crucial to successful applications of these approaches included appropriate accommodation. The search for a suitable model of accommodation provision-supported housing- acceptable to both consumers and mental health professionals has begun to be resolved in recent years. However, its implementation is still in its infancy, as knowledge of best practice in mental health service delivery often seems to lag behind application of best practice.

The 'road to recovery' for the mentally disabled starts with attaining the basic needs required for survival and subsequently building on these to realize the goal of returning to a normal life. The basic needs of shelter, food and stable housing must be achieved in order to provide a foundation for the recovery process. The fact that many

mentally disabled individual's living arrangements were contributing to the persistence of their impairment meant that provision of the basic needs is necessarily a priority (Falloon & Fadden, 1993).

Initially, many mental health service planners operated a Linear Residential Treatment (LRT) model where consumers moved through a series of settings- quarterway houses, halfway houses and three-quarterway houses- in order to prepare them for independent living in the community (Tsemberis, 1999). Consumers were moved to the next house in the continuum when staff judged them capable of living in an environment with less support. The popularity of this approach first implemented in the 1970s is evidenced by its still widespread use today in New Zealand where the houses are categorized by the level of support required for residents. Housing categories range from Level 4 for the most severely disabled who require 24-hour support to Level 1 for individuals who need minimal support (Deane, Huzziff & Beaumont, 1995; Ernst and Young, 1996).

Outcome studies on the effectiveness of LRT and similar programmes are few in number and show little evidence of individuals progressing towards independent living. Okin, Borus, Baer and Jones (1995) followed the progress of 57 chronically mentally disabled individuals over 7.5 years after discharge from an institution to structured community residences that provided 24-hour staff supervision. They found that some residents (28%) had moved on to independent living, others (57%) remained in supported residences and some (16%) had returned to an institutional environment. Furthermore, and perhaps disturbing for LRT advocates, there was no evidence found of an improvement in individual's living skills. Geller and Fisher (1993) surveyed the progress of all mentally disabled individuals in residential placements in western Massachusetts over a period of four years and concluded that there was little progression towards independent living.

Trieman, Smith, Kendal and Leff's (1998) large scale study in London on the follow up of 465 patients relocated mostly to staffed accommodation in the community also found little movement towards independent living. Unlike the LRT model, there was no pressure for consumers to move on from their original placement and only a handful made the step to independent living in this five-year study. This research

found that 71% of the ex-patients remained in staffed accommodation and any transitions between houses showed only a slight trend towards a residence with less support. Despite these findings, these studies did show that many mentally disabled individuals could live in the community with appropriate supports. However, they also demonstrated that these same individuals were making little progress in making the move to independent living. It should be noted that in these three studies (Trieman et al, 1998; Okin et al, 1995; Geller & Fisher, 1993) there was little or no reference precisely to what 'support' entailed for the participants in their research.

Both mental health professionals and consumers expressed doubts about the effectiveness of these traditional housing approaches with several important flaws being identified (Tsemberis, 1999). These included no client choice in choosing their house, the stress of repeated moves, and the length of the process. The fundamental problem with this type of care in the community was the role that mental health services were playing as housing providers. This is a role that has been forced on them as local housing authorities have often viewed accommodating the mentally disabled as a health issue, not a housing issue (Carling, 1990a).

The disparity in views between what professionals and consumers viewed as appropriate housing became apparent as consumer pressure groups began agitating for suitable housing. Whilst professionals often recommended the transitional model of highly staffed houses, consumers more often preferred living in a normal house with outside flexible supports (Carling, 1990a). Consumers generally did not wish to have staff living with them, preferring to have them available by phone or in person if support was required. In addition, there was little desire found to live with other consumers. Friends or a romantic partner were the preferred choices (Owen, Rutherford, Jones, Wright et al, 1996).

The increasing recognition of the consumer's perspective coupled with the general acceptance by professionals of rehabilitation and recovery principles has led to a new approach. This approach, termed supported housing, in common with previous programmes, has as its ultimate goal full community integration for the consumer. The emphasis, however, is focussed on consumer preferences (Carling 1990a). The role of the mental health services is to facilitate these preferences for housing and

level of support not to make these decisions for the consumer. The underlying rationale for this change in policy is that it is the consumers who are most affected by housing choice. Therefore, their input into this choice is crucial (Srebnik, Livingston, Gordon & King, 1995). This philosophy change is also in line with the rehabilitation principles that emphasize consumer involvement in planning and a collaborative approach.

The term 'supported housing' has only been in use since 1987 when it was proposed that the mentally disabled should be afforded the opportunity to live in the community in normal housing, albeit with specialized supports (Carling, 1990b). The involvement of the mental health services in acquiring this type of accommodation was necessary given the difficulties encountered previously by the mentally disabled. In their search for suitable housing by themselves, it was reported that many encountered hostility and suspicion with landlords often unwilling to accommodate them (Segal, Baumohl & Moyles, 1980). Additionally, some were at the mercy of unscrupulous people willing to take advantage of their impairment for financial gain. Another factor was, and continues to be, the periodic misrepresentation in the media of the mentally disabled as dangerous, meaning that many in the community actively campaigned against them living there. Finally, their symptomatology often interfered with their ability both to find appropriate housing and to live successfully in it (Blanch & Carling, 1988).

The supported housing approach has two major components: first it involves acquiring suitable accommodation based on consumer choice. Second, it applies the principles of psychiatric rehabilitation to aid the individual's recovery. Unlike the continuum model of the seventies, people are under no time limit to move to other accommodation nor do they lose their residence if they are temporarily hospitalised. Consumer involvement in selection of the housing is deemed essential to the process. The location of the house is also of paramount importance with the ideal being a wide geographic dispersal of supported houses throughout the community. The rationale here is that it prevents the creation of 'ghettoes' of mentally disabled as discussed earlier (Carling, 1990b).

Hogan and Carling (1992, p.220-224) developed a set of guiding principles that are meant to guide the selection of appropriate housing to maximise rehabilitation and recovery prospects:

“

1. Housing must be chosen by consumers.
2. Neighbourhoods should be chosen based on their likely ability to assimilate and support consumers.
3. The number of labelled or stigmatised residents in relation to the total number of residents in the overall housing unit is critical and should be limited and consistent with community norms.
4. The appearance of the housing should be consistent with neighbourhood norms.
5. Housing should be selected which keeps levels of stress manageable.
6. Housing should enhance stability not be time-limited.
7. Housing should enhance opportunities for control over the environment.

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The latter three guidelines are specifically geared towards the special needs of the mentally disabled individual.

Comparisons of the supported housing approach to the linear residential program have taken place with results justifying the former approach. Tsemberis (1999) found that 139 tenants of a supported housing program attained an 84.2% housing-retention rate over a three year period. The comparison group of 2864 residents of the transitional program achieved only a 59.6% housing retention rate over a shorter two-year period. Individuals in the supported housing program had severe mental disabilities, many with very active psychiatric symptoms and in general were viewed as ‘worse off’ compared to the individuals in the linear residential treatment program. Despite their greater handicap, the success rate in residential stability in a supported housing approach has been quite encouraging indeed.

However, it should be noted that in this study the participants were allocated their apartments with no mention of them having any choice in the process. Many programmes that describe themselves as operating a policy of supported housing still make the housing choice for the consumer. As discussed, it is this principle of choice that underpins the whole process. However, it appears that mental health professionals sometimes have difficulty in allowing consumers to make this choice.

The reasons that any individual has for choosing a particular house are often like non-mentally disabled, idiosyncratic, and the mental health professional's view may be at odds with that of the consumer. Involvement is important as it affords the individual a certain sense of responsibility and control over their own lives. Mental health professionals, though well meaning in their endeavours, may in fact be hindering the recovery process for the individual by facilitating dependence rather than choice (Blanch & Carling, 1988). The importance of providing greater choice to consumers has been shown to have a demonstrable impact on residential stability, desire to stay in residence, happiness and life satisfaction (Srebnik et al, 1995). This was found to be so even when the choice is very limited.

There appears to be a lack of adherence to the recommended guidelines of supported housing with regard to consumer involvement in housing choices. There has been a proliferation of programmes describing their approach to community living for mentally disabled as a supported housing program. The term 'supported housing' is used in the literature regardless of whether consumers have had any input into selecting the particular place of residence. In addition, the supported housing approach is still in its infancy. Consequently, research on its variations and efficacy are still limited by this factor. When one endeavours to assess the effectiveness of the supported housing approach, one must be aware that what is described as supported housing may bear little resemblance to current definitions.

Many of New Zealand's mental health service providers operate what they describe as a supported housing approach. The language used in the 1995 stocktake of mental health services paints a different scenario (Ernst and Young, 1996). The description of availability of supported housing is described in bed numbers available. This is not the home description envisaged by the developers of the supported housing approach. The term 'supported housing' is even used in the description of a continuum of care model where levels 1-4 are described as supported housing (e.g. Central Regional Health Authority, 1996).

Consumers confirm the lack of housing choice available for the mentally disabled in New Zealand communities. Consumer A¹ (personal communication, September 15, 2000) described being assigned a bed in a particular residence following discharge from psychiatric units. The level of support was determined by clinical staff from the psychiatric units. There is reportedly much frustration with this process as often they are receiving support whether they need it or not. The same complaint alluded to earlier about mental health providers also acting as housing providers is also a source of dissatisfaction. They appreciate that mental services have a role to play in helping them acquire the home in which they wish to live. However, consumers want to be able to choose their own home, not have it decided for them and have flexible supports when required.

This description of a lack of housing choice must be treated with caution as mental health service delivery in New Zealand differs from region to region. Consumer representatives in the Manawatu apparently are generally satisfied with housing options and the quality of support (Consumer B², personal communication, September 20, 2000). A continuum model of housing is the preferred option in the Manawatu region. Anecdotal reports suggest that this has been quite successful in moving some consumers to independent living status. Providers in this region also operate a 'friendly landlord' scheme where consumers can choose their house and live independently in the community in normal housing with support when required. This 'friendly landlord' scheme with its emphasis on normal housing in the community with support when required seems to fit the criteria of a supported housing approach. On the other hand, other housing in New Zealand, and even in the Manawatu, is not 'supported' (e.g., not chosen by consumers, mandatory on-site workers).

The Mental Health Commission in its plan for how mental health services should be delivered places great emphasis on the use of the recovery approach (NMHWDCC, 1999). The recovery vision described in this document includes the principle that "mental health services should provide for people in the context of their whole lives, not just their illness" (NMHWDCC, 1999, p17). The provision of the type of housing

¹ Owing to the Privacy Act consumer's identities were kept confidential. Consumer A is a representative of a consumer advocacy group.

² Owing to the Privacy Act consumer's identities were kept confidential. Consumer B is a representative of a consumer advocacy group.

that consumers wish to live in appears to depend on quality of providers in whatever region of New Zealand in which one resides. There are several hundred providers of accommodation for the mentally disabled in New Zealand, most of them describing themselves as using a supported housing approach. It does appear that many do apply some facets of this approach in their service delivery, while not wholly subscribing to all recommended criteria (e.g. Ernst and Young, 1996).

Historically, mental health services have always been the 'poor relation' when it comes to government funding, and the monies devoted to hospitals have not been diverted to community care following the policy of deinstitutionalisation (Abbot, 1985). It is easy to criticise service delivery and suggest alternatives but health authorities are working with limited budgets with regard to mental health. The Mental Health Commission has committed itself to innovative regional projects including housing that can deliver the best possible recovery for consumers (NMHWDC, 1999). In addition, the current Labour Government has committed itself to implementing all the recommendations of the Blueprint for Mental Health Services (Office of the Prime Minister, 2000). It appears that there is now a greater emphasis being placed on mental health issues. This is a welcome situation that can only bode well for consumers and the workers employed in this challenging field.

Mental Health Support Workers

The development of the rehabilitation, recovery and supported housing approaches by mental health service planners augurs well for the delivery of appropriate services to mentally disabled individuals living in the community. The essence of successful application of this new mode of service delivery is very much dependent on the abilities of the personnel who work in this area. Psychiatrists, psychologists, social workers and nurses constitute the personnel in the core disciplines in the mental health field. The literature has in general focused on their roles in the care of clients. The most numerous of the mental health workforce, however, is the so-called non-professional worker. These mental health personnel spend by far the most time with consumers. Their role in client care has in comparison to professional staff been largely overlooked in the literature. However, from the 1970s onwards, there has been

a growing recognition of the role these workers play in client rehabilitation and recovery (Alley & Blanton, 1976).

The use of non-professional staff in the care of mentally disabled individuals is not a new notion. It has its origins in the late 18th century (Levine, Tulkin, Intagliata, Perry, & Whitson, 1979). This was a period following the French Revolution when humanistic ideals dominated the thinking of the educated and ruling classes. Attention began to focus on the plight of those less advantaged in society. For example, the deplorable conditions in the asylums at that time came under scrutiny. Concerned citizens in Britain and the U.S.A. began to involve themselves in charitable organization aimed at reformation of the traditional asylums and to provide care for the mentally ill (Davison & Neale, 1998). These private organizations established their own institutions in which they pioneered a new type of treatment-moral therapy. This approach emphasized a more respectful relationship between staff and patients with the focus being on normalization of the patient's lives (Levine et al, 1979). Non-professional staff were specially trained to interact with patients and given important treatment responsibilities.

Moral therapy was abandoned in the latter portion of the 19th century with the opening of large state institutions (Davison & Neale, 1998). Their administration by the medical profession brought a change in treatment emphasis focussed on the biological aspects of the patient's illness rather than the psychological aspects highlighted in moral therapy. The money once used for attendant salary payment was redirected towards the tools of the medical trade. The non-professional worker no longer played a central therapeutic role. Their role in the state institutions reverted to that of custodian rather than carer (Scull, 1984).

This backward step for the non-professional was in marked contrast to workers in equivalent positions in other human service fields. Worker's contributions in areas such as provision of help for the poor and supervision of offenders flourished to such an extent that they became recognized as crucial to the success of those programmes. This led to the development and recognition of the new professions of social worker and probation officer by the start of the twentieth century (Levine et al, 1979).

The custodial focus remained the case until the late 1940s following the end of World War II. This conflict with its high numbers of neuropsychiatric injuries and the rejection of many potential soldiers by the draft board due to psychological difficulties demonstrated how serious a problem mental illness was in the U.S.A. (Levine et al, 1979). The growing awareness of the substandard conditions in state institutions and change in policy with the introduction of deinstitutionalization brought a realization that there was simply not enough personnel to deal with the mentally disabled (Sobey, 1970). The increased involvement of the non-professional worker began to be mooted as a possible solution to this chronic shortage of trained personnel (Matarazzo, 1971). In addition to reasons cited earlier, this option was also a much cheaper alternative than the massive increase in the professional workforce that would be required to deal with this crisis.

The impetus for this change in thinking in the U.S.A. came with the report by Albee (1959, in Matarazzo, 1971) that dramatically detailed the deficiencies in manpower within the professional mental health workforce and which projected correctly only a worsening of the situation. The rapid turnover of the non-professional staff in the institutional environment had long been a concern for both hospital administrators and the professional health workforce. This turnover problem coupled with senior staff observations that these workers could have profound positive impacts on patient outcome- both negative and positive- demanded a more appropriate usage of this human resource (Hadley, True, & Kepes, 1970). In the U.S.A., psychiatrists and psychologists, independently, began out of necessity to train non-professional staff to act in one to one roles with mentally disabled in both the institutional and community environment (Matarazzo, 1971). At this stage, there was no national policy in America laid down regarding the use of non-professional staff. Rather, they were the only personnel available in many cases and this dictated their utilization.

Despite the lack of a coordinated policy governing how professionals could best exploit the non-professional's skills, their involvement as therapeutic agents was given a boost by the concept of the 'therapeutic community' (Matarazzo, 1971). The essence of this approach was that all mental health personnel, regardless of job title, became integral parts of the patient's treatment program (Davison & Neale, 1998). The rationale behind it was that patient's health was influenced by the social

atmosphere of their environment, which in this approach is largely determined by the actions and attitudes of the staff (Hadley et al, 1970). The success of such programmes led to an increased call from within the professional ranks for formal recognition of the non-professional's therapeutic role. A simple renaming of hospital attendant to psychiatric aide was a step (Matarazzo, 1971). More importantly, opportunities were provided for these staff to access educational programmes that could build and enhance their skills.

The development of the community college in the U.S.A, which catered for both the working adult and youth from the lower socio-economic strata, provided the location for the education of the non-professional mental health worker (Matarazzo, 1971). The demand for education eventually led to colleges offering one or two year associate degree courses to these workers that trained the worker to carry out a host of helping skills to serve their client (Levine et al, 1979).

Courses on offer varied with some students training to work with specific populations such as those with alcohol dependence while others offered a much broader education in the field of mental health (McGee & Pope, 1975). The policy of deinstitutionalisation also meant that the traditional locus of care (i.e., the institution) was becoming increasingly redundant. Consequently, there was an urgent need to fill the manpower pool with staff that had the requisite skills to work successfully in the community. The graduates from these programs could no longer be referred to as non-professional staff given the host of skills they had acquired and were usually referred by the generic terms, paraprofessionals or human service workers. These two terms cover a number of titles given to these personnel that include mental health technician, support worker, psychiatric technician/aide, case monitor, life skills instructor, case worker and many more too numerous to list. In this study, the term 'support worker' is used as the descriptive title for all these personnel as it is the most familiar one in New Zealand.

The growth in the U.S.A of these human service educational programs has been dramatic producing 12,000 graduates by 1976 (Felton, Wallach, & Gallo, 1974) with over 500 academic programs currently available (NOHSE, 2000). These range from the original two-year associate degrees to four-year bachelor's degrees in human

services. The latter have been formatted to develop an entirely new type of worker - the 'generalist' -, trained to have a multiplicity of skills that can be employed in a wide variety of settings (NOHSE, 2000).

The U.S.A. has led the way with the training of the non professional mental health worker and the appreciation of the contribution these workers can make to client's lives. The rest of the Western world has been less progressive in comparison in utilizing this valuable resource. In the U.K., there is a non-professional vocational qualification referred to as a Non-Vocational Qualification in Health and Social Care, but there is no requirement for support workers to have such a qualification. Its content is determined locally by employers and as such is not viewed as an academic qualification (Rory Bowe, personal communication, December 12, 2000). The New Zealand support worker can now avail him or herself of the National Certificate in Mental Health Support Work that was launched in February 1998 (NMHWCC, 1999). This is a one-year course developed specifically for the mental health support worker and is run nationally through 21 colleges and through the Open Polytechnic (Sue Ellis, personal communication, December 14, 2000). The establishment of such a certificate is a welcome if somewhat belated development and there is the goal of all support workers having this certificate by 2005. However, it should be noted that employers in New Zealand are not required to ask prospective employees to have such certification (Peter Gallagher, personal communication, May 12, 2000).

The growth of the human service educational programmes is due mainly to the successes of their graduates in the workplace. These workers have demonstrably proven their worth in the mental health field in both the institutional and community setting (Peterson, Wirth & Wolkon, 1979). The psychiatric hospital is a setting where the support worker has been given an increased responsibility in patient care. The hospital environment, where patients are likely to be severely disturbed, demands these staff to be highly skilled in their work. Therapeutically interacting with patients is a central part of treatment, and the support worker as the staff member with most patient contact is the ideal person to deliver much of the treatment programme (Cournos, 1993).

The support worker's role in the hospital setting is characterised by a lack of specificity (Lewin, 1985). They are there to be with the patients and to facilitate participation in the treatment program. This description of worker function may seem loose or vague. However, it encompasses a potentially huge range of specific tasks. Examples of their work include helping the severely regressed patient to take responsibility of their basic body functions and aiding the patient to express their frustrations verbally rather than through actions (Lewin, 1985). The concept of the therapeutic community cemented the importance of the role of the support worker in the institutional environment with their contribution to patients' rehabilitation.

It should be noted that the positive therapeutic emphasis articulated here on the role the institutional support worker plays was often not found in practice. It appears the depth and breadth of their utilization in patient care was very dependent on the facility where they were employed and their educational and training qualifications. Some facilities demanded that staff have at least an associate degree in a mental health program. For others, a high school diploma would suffice (Kimmel, 1994). In the U.S.A., state law often governed the hiring of staff. For example, California demands two years varsity training in state facilities whilst North Carolina has no such requirement (Kevin Ronan, personal communication, December 19, 2000). One would surmise that these differences in skills due to education and training would most probably be a fair indicator of the quality of treatment offered to the patient.

As mentioned, the equivalent workers in New Zealand institutions are not required to have any formal qualification. There has been a drive by some concerned professionals to train these workers with the impetus usually being determined at a local level. The Lake Alice Hospital in Wanganui did provide a series of training programmes for its staff both in the management of the individual within the institutional setting and in preparing these individuals for community living. There is no follow up information available on the success of such programmes. However, the fact that they were established perhaps reflected concern professionals had regarding the abilities of the non-professional worker in patient care (Gregory, 1984).

The trend nowadays towards shorter stays in psychiatric institutions coupled with push to move long stay patients to the community has led to a change in emphasis for

all hospital personnel. The focus for these patients is the development of the requisite skills necessary for successful community living. This change in emphasis in patient treatment did not lead to a diminishing of the support worker's role in the management of the patient's disability. Rather, it represented an increase in their workload. Again, as the staff members who had most frequent contact with the patients, support workers were trained to provide rehabilitation skills deemed necessary for patient functioning outside the hospital. The results of this type of staff training have been equivocal as the policy of deinstitutionalization was understandably accompanied by support worker fears about their long-term job security. Farkas (1982) found that while such training was beneficial for the staff in the sense of their perceived ability to carry out their work, the prevailing climate of apathy in the institutions appeared to prevent the staff meeting minimal levels of competence that allowed them to practice their new skills.

The move to the community living by the mentally disabled with the establishment of sheltered and supported accommodation has led to a large increase in the numbers employed in these settings as mental health support workers. While many writers and commentators have rightly focussed on the negative aspects of community living, the use of properly trained support workers have demonstrably proven their worth in facilitating successful community integration by mentally disabled individuals (Peterson et al, 1979). It helps of course when these workers are operating in a setting conducive to the goals of rehabilitation and recovery for the mentally disabled individual.

The role of the support worker in a community setting is similar to that in the institutional setting in that it is also characterised by some as having a lack of specificity (Lewin, 1985). Among their duties is education of clients on the basics of community living, liaising with local businesses and neighbours and to provide crisis intervention when needed (Rhode & Nehls, 1996). This brief outline of the support worker's role may mask the volume of work that they carry out with their clients. Education of clients in community living means helping them with practically all aspects of their daily lives. Shopping, budgeting, using public transport, maintaining personal hygiene, keeping accommodation clean, appropriate social behaviour are all part of successful community living. Many clients have to relearn or learn these skills

while at the same time cope with the stresses of having a mental disability, the symptoms of which can prove a very active obstacle to the acquisition of such skills.

The role of the support worker in this process has been described as a 'teacher as learner role', where in order to facilitate client skill acquisition, support workers must gain insight in what it is actually like to live with a mental disability in the community (Rohde & Nehls, 1996). Often support workers, unlike mental health professionals, may start their job with only a very limited knowledge about mental illness due to a lack of training. The process of engagement with a client is the start of this learning process that allows the worker to get to know the client as a person rather than from knowledge gained elsewhere. The support worker is in this unique position of knowing their client better than any professional by virtue of the time they spend with them, and as discussed, are in a position to be an integral tool in facilitating client rehabilitation and recovery.

Whilst the potential is there, the fact remains that a large percentage of this workforce lacks sufficient training to carry out their duties. In the field of rehabilitation, it is a fundamental truth that successful community functioning is closely associated with the development of skills and supports (Anthony et al, 1988). As discussed, there is also awareness that the individual well placed to facilitate this skill development is the support worker. However, despite this knowledge, this group is still often not trained in how to carry out this type of task. Anthony et al (1988) describe this situation as one endemic throughout mental health training, where there may be knowledge of best practice, but despite this, it may not be taught adequately.

The advent of the concept of care in the community has been beset by many difficulties. These have been compounded by the employment of untrained support workers. Senn, Kendal, Willets and Trieman (1997) found in North London that the shift to community residences was accompanied by the recruitment of unqualified staff, especially in the private sector. Whilst there was a view that these workers would provide a 'normalising' environment, this did not take into account the skills that are required when an individual's mental state deteriorates. A less charitable view of the situation described by Senn et al (1997) would be that the employers availed themselves of the cheapest staff option.

The lack of support staff training is a recurring feature in the literature and is not confined to any particular country. A survey of 205 residential staff in New York who dealt with mentally disabled substance abusing clients found that they were inadequately trained to work with this client population (Goodman, Landsberg, Estrine & Warga, 1994). This lack of training was manifested through lack of intervention and assessment skills. The authors of this report concluded that these staff were so poorly prepared for this type of work, that they were providing little, if any, concrete help for their clients.

The value of training support staff was demonstrated in a statewide initiative in Ontario, Canada where a Mental Health Education Plan was delivered to support staff through a series of workshops (Weisberg, 1996). Its components included help in identifying mental health issues, prevention and effective community integration. Follow-up investigation after 3 months found dramatic changes in how support staff related to their clientele with their newfound knowledge. Staff were more confident in their abilities to work with their clients and to provide intervention with their recently acquired insight into the client's perspective. Significantly two-thirds reported that they themselves had made at least one permanent change to their own behaviour with clients as a result of this training.

Given the benefits of training support staff, it begs the question of why this is not the universal norm? There may be a perception amongst some professionals that the use of properly trained support staff may in some way lead to a dilution of the professional's role. The support worker may be viewed as a threat if they and the professional's role overlap in the care of clients. Workman (1996) found that nursing staff on a general hospital ward could be quite hostile and negative if they felt support workers were carrying out duties that they felt challenged their status as professionals. A more disturbing possibility that could explain this lack of training is the hint of a more general malaise that may afflict the training of mental health practice in general. Ford, Middleton, Palmer and Farrington (1997) found that primary healthcare workers including GPs, practice nurses and community psychiatric nurses felt that they were not sufficiently trained to meet the needs of many mentally disabled clients. The respondents in this research pinpointed needs for training in communication skills and

in the assessment and management of mood and anxiety disorders. The professional that a support worker would have most contact with is the psychiatric nurse and, if the nurses believe that they require training in communication, it is hard to see how they could adequately supervise support worker training and experience.

The lack of a proper universal job description for mental health support workers combined with no statutory requirements has allowed many organizations to continue hiring untrained staff. One effect of having a lowly trained workforce is the view that this is a career of limited prospects (Senn et al, 1997). The combination of poorly trained staff with an associated potential for low morale surely does not make for an atmosphere where optimum practice of the principles of rehabilitation and recovery for mentally disabled clients would occur.

New Zealand is apparently the first country that has recently laid down a set of guidelines regarding what is expected of a support worker. The National Mental Health Workforce Coordinating Committee (1999) has developed a set of core competencies that describe in detail both the requisite knowledge required for this type of work and the duties one would expect a support worker to carry out (see Appendix A). These recommended competencies are used as the reference points for the standards that make up the National Certificate in Mental Health Support Work. New Zealand is perhaps fortunate compared to other countries in that its small size perhaps allows it to develop a universal set of skills for its support workers. In contrast, the U.S.A. is constrained by different states having different laws regarding the level to which support workers should be educated and the scope of their duties. It should be re-emphasized that despite this very welcome development in New Zealand, employers still are not required to ask their prospective employees to have any sort of training. Unless this obligation is fulfilled, the deficits found in client care overseas will in all probability be replicated here.

The Competent Support Worker

As alluded to in the previous section, a major impediment to the development of the position of mental health support worker historically has been the lack of a specific

role definition for this type of worker (Lewin, 1985). While general descriptions were intended to portray the all-encompassing part the worker plays in a client's rehabilitation, it also demonstrates a major difficulty for these workers. The array of competencies required to carry out one's duties as a professional mental health service worker (e.g. psychiatrist, psychologist) are clearly defined through codes of practice. Furthermore, these personnel are expected to display clinical competencies by virtue of their extensive and detailed training in the treatment of mental disorders. Support workers very often do not have these luxuries that include a clearly defined set of competencies deemed necessary to carry out their job successfully.

A fundamental question is what role should the support worker play? Do they carry out the non-professional work thus freeing up professionals to carry out more specialized tasks (Alley & Blanton, 1976)? Should they be carrying out some of the same therapeutic work as professionals since they may be as effective at this type of work (Durlak, 1979)?

The fact of course is that the manner by which the worker's role and responsibilities are defined will often be dependent on the employer, particularly in the absence of Government regulations. Other factors that impact on role definition include type of client, the staffing pattern and the amount of money that the employer is willing to spend on staff development (Harrington & Honda, 1986). The philosophy of treatment subscribed to by the employer is the starting point when one outlines the support worker's role. This philosophy will provide overall direction as to how the worker interacts with clientele, with the recovery ethos now the generally accepted mode of practice (Mental Health Commission, 1997). Further, it is desirable that any designated roles for the support worker should be supported by empirical evidence.

Away from the work setting, some literature has focussed on determining what exactly defines the support worker's role. In a move towards consolidating the worker's position as a member of the treatment team, Harrington and Honda (1986) described the job of the support worker within the child and youth mental health arena as one that required the assumption of four major roles: therapeutic counsellor, manager, teacher and relationship builder. These roles could be generalised to all mental health support workers whatever the age of their clientele. In addition, each

role demands specific competencies. Usually these skills are acquired by a mixture of experience, in-house training, supervision and education as one often has to work 'in situ' in order to achieve the requisite competencies. However, there is little information regarding the description of which of these skills, attitudes and knowledge allow for successful assumption of these roles.

In a similar vein, Felton, Wallach and Gallo (1974) emphasized what they considered to be the four main roles the hospital mental health worker should assume in the institutional setting. These roles were geared towards the implementation of a hospital training programme for the hospital-based support worker. The recommended principal roles were patient advocate, a longer-term contact person following deinstitutionalisation, integrator of the patient's treatment and, lastly, the worker who acts as a relief for professionals in the less specialized areas of their work. This programme was three years in duration and, as such, was quite comprehensive. One would suspect that very few facilities, if any, in New Zealand, could afford to invest that amount of time and money in developing the skills of support workers to this extent.

Recently, Evans and Moltzen (2000) identified six domains that they deemed essential for the successful support of the seriously mentally disabled client in a community setting. These were acceptance, creating a positive atmosphere, an expectation of change, responsiveness to client needs, normalisation and an educative function. The rationale behind this research was to find the ideal worker styles that would promote the maximum probability of client rehabilitation. The value of this research is underlined by the linkage of these recommended worker styles to empirical evidence that support their positive impact to client outcome (Evans & Moltzen, 2000).

The literature described here gives an insight into the difficulties experienced in trying to provide a concrete definition of the support worker's role. The most valuable addition to this field in New Zealand and perhaps further afield came with the publication of the 'Developing the Mental Health Workforce' document by the National Mental Health Workforce Development Coordinating Committee (1999). This body undertook as its mission the development of core competencies for the entire mental health workforce in New Zealand in response to concerns that there

were serious deficiencies in areas of work practice (Clark & Hughes, 1996; Midland Health, 1997). The document included recommended competencies for all workers which focussed on particular areas of mental health. The competencies were developed through consultation with workers, providers and consumers. While there is an emphasis on New Zealand issues, especially with regard to the Treaty of Waitangi, the competencies otherwise might be applicable universally.

This document outlines ten basic core competencies required by all mental health workers in New Zealand. These are:

- demonstration of knowledge and understanding of mental health, illness and services
- effective communication
- demonstration of culturally appropriate practice
- assessment of client health needs
- provision of appropriate intervention for clients
- clear, concise and accurate record keeping
- safe and ethical practice
- compliance with legal responsibilities
- promotion of the health and wellness of clients, families and communities
- promotion of individual professional growth.

These competencies cover the care of the individual in some detail and reflect the growing role that the mental health support worker is expected to play in the promotion of mental health in the community. The recommendation of active participation in the community mirrors a growing trend of recognition in the U.S.A. and elsewhere of the key roles that support workers play as contributors to the development of healthier communities (Kinder & Cashman, 1998).

The authors of this report also defined specific performance criteria for each of these competencies that set out what the requirements are for the achievement of a particular competency. For the support worker and their superiors, this document confers advantages. No longer does the support worker have to 'fumble in the dark' regarding what is and what is not appropriate work practice. The benefit of formalising the role of the support worker is obvious as it provides the worker (and other members of the mental health team) with a comprehensive job description that details both the worker's duties and the boundaries of their work practice. Their role in client care and their duties are clearly defined thus preventing confusion and

distrust that sometimes has permeated professional staff/support staff relationships (Workman, 1996). This document allows both employers and employees to identify any areas of competence where staff may be competent or deficient.

A further advantage of this list of recommended competencies is that allows research to be carried out concerning the current status of competency of the New Zealand mental health support workforce according to the criteria outlined in this document.

Evaluating the competency of an individual with regard to their work practice is a task that requires sensitivity. Competence in essence is a construct that is immeasurable in itself. Rather, it is manifested through performance activities that lend themselves to measurement (Bergevin, 2000). A core competency is basically a subset of an overall competency-a key feature that is crucial to the make-up of the overall competency (Lahti, 1999). Core competencies can be defined at two levels-those at an organizational level and those at the individual level. Lahti (1999, p.67) defined individual level core competencies as “the integration of knowledge, skills abilities and other characteristics that are critical to the success of an individual within an organization”.

The National Mental health Workforce Development Coordinating Committee has proposed that its ten recommended individual level core competencies, with their accompanying performance criteria, represent what they consider the appropriate areas where a New Zealand mental health support worker should be competent (Appendix A). In addition, the development of these competencies fulfils the simple definition of a standard of competence: each should have (a) an element of competence, (b) a range statement and (c) performance criteria (Moloney, 1992). For example, ‘Every mental health worker will be able to’ (range statement), ‘Assess consumer health needs’ (element of competence), by ‘elicit(ing) pertinent data’ (performance criteria).

In addition to ability, the author concurs with Bergevin’s (2000) view that competence also has an attitudinal component. One may have been trained to the requisite skill level and be aware of best practice, but an attitude at odds with training and knowledge will surely impact on one’s personal work practice. The job of the

mental health support worker is not an easy one, and the worker may be interacting with clients who may be extremely challenging. The nature of a client's disability can result in workers facing behaviour that contravenes all social norms. The worker may possess the requisite abilities to deal with such a state of affairs but assume an attitude that is insufficient to meet the client's needs. The reverse can also occur where the worker has the correct attitude but does not have the necessary skills to handle the situation in an appropriate manner. In both these scenarios, competent work practice is not being demonstrated. Competence has to reflect the important impact that staff attitudes have been shown to have on client relapse, recovery and life satisfaction (Coursey et al, 2000).

A final factor – related to both attitudes and skills – that can have a major influence on the ability and attitude of staff is the effect of their current work environment. The ultimate aim in the psychiatric setting is for staff to provide effective care for their clientele. The workplace environment can have both positive and negative impacts on staff, which in turn can affect both staff morale and performance. Moos (1997) found that both job performance and morale had a strong association with workplaces characterised by staff as more involved and supportive. In addition, such work environments have been found to have a positive impact on treatment efficacy (Moos, 1996).

This research conceptualises competence as having three intersecting domains-skills, attitudes and the effect of the work setting. This is represented in Figure 1.

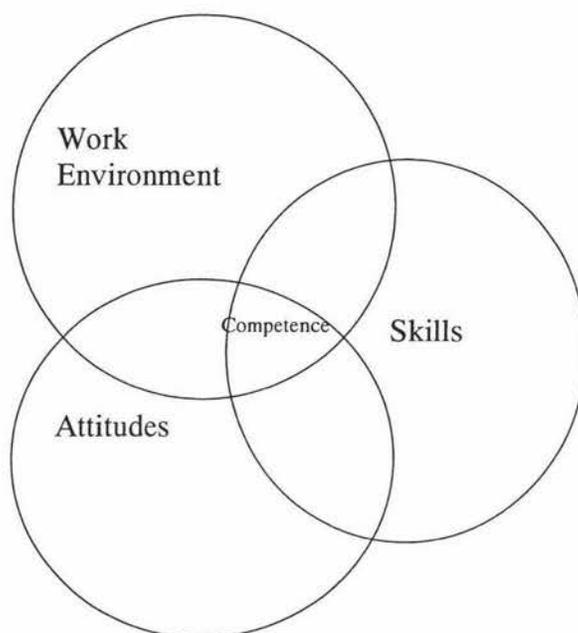


Figure 1. Domains of competence.

The purpose of the research undertaken in this study was to examine the current competency status of the New Zealand mental health support worker. The criteria used to examine this status are those recommended by the New Zealand National Mental Health Workforce Development Coordinating Committee (NMHWDCC, 1999). These core competencies have not as yet been placed under scrutiny. The intention in this study was to evaluate these recommended competencies via the domains of skills and attitudes in the hope it will bring a greater understanding of the work these staff carry out and an appreciation of the valuable role they play in the rehabilitation and recovery of the mentally disabled. In addition, this study intends also to evaluate worker's competence through the related domain of the perceived quality of their work environment.

Method

Ethical Issues

Ethical approval was sought from the Massey University Ethics Committee, from which approval was obtained (Appendix B) following their request for some amendments regarding how the skills and attitudes questionnaire should be described to participants in the Information Sheet (1) (Appendix C).

Participation was both completely voluntary and anonymous. These two points were stressed to participants, as was the fact that their responses would be kept strictly confidential to both the researcher and his supervisor (see Information Sheet (2), Appendix D).

Validity of competencies

The assessment of support worker's skills and attitudes was based on the recommended core competencies and the accompanying criteria laid down by the New Zealand National Mental Health Workforce Development Co-ordinating Committee. Apart from using their own expertise and experience in the field, this committee took note of skill deficiencies that had previously been identified (NMHWDC, 1999). Clark and Hughes (1996) were commissioned by the Central Regional Health Authority to analyse the skills of the mental health workforce. Their analysis found needs for training for all mental health workers in the following areas:

- cultural assessment
- knowledge about mental illness/early recognition of mental illness
- assessment
- understanding of care processes
- working with families
- basic knowledge of specialist areas-e.g. alcohol & drugs

A similar analysis conducted by Midland Health (1997) reached similar conclusions and in addition noted deficiencies in these areas:

- therapeutic interventions
- rehabilitation
- teamwork

Following the incorporation of these into an initial draft, NMHWDC (1999) reported that the competencies were then circulated widely to educators, training and service providers and regulatory bodies with reportedly little dispute on content. However, before a measuring instrument based on these competencies could be developed, it was deemed necessary to assess the validity of these competencies.

To achieve this, it was decided to compare the New Zealand competencies with other recommended core competencies for mental health support workers in order to establish evidence of convergent validity. These other examples of recommended competencies were located by searching the databases Psych Lit and Psych Info, the Worldwide Web, and by obtaining job descriptions of the responsibilities and duties from providers in New Zealand. This search resulted in a list of 30 separate documents that describe recommended competencies, standards and responsibilities for non-professional mental health workers. Examples on this list include those standards required for practice as a psychiatric technician in the U.S.A., recommended core competencies for keyworkers in the U.K., and a job description that describes the primary responsibilities of a tenant support person employed by a New Zealand provider. The full list of the sources of these job descriptions and indices of competencies is provided in Appendix E.

The researcher and a trained rater examined each document on this list in order to determine the core competencies of the non-professional mental health worker. This involved analysing the recommended competencies, skills and necessary performance criteria laid down in each one of these documents and recording what competencies appeared to be present. This exercise resulted in the identification of eight core recommended competencies in addition to the ten specified by the NMHWDC (1999). This was to be expected given that some organizations require their workers to play a more expansive or very specific role in client care compared to others. For

example, the professional standards of practice for California Psychiatric Technicians require these personnel to be competent in assessing the medical status of their clientele (California Association of Psychiatric Technicians, 2000).

The identification of specific core competencies in each of these 30 job descriptions and recommended competency lists is shown in Table 1. The level of interrater agreement regarding specific core competency presence in each sample document was 84%.

Table 1.

Core competency presence identification scores from the 30 documents of job descriptions and recommended competency lists.

<u>Core Competency</u>	<u>Competency presence in document</u>
Demonstrate knowledge and understanding of mental health, mental illness and mental health services *	27/30
Communicate effectively*	30/30
Demonstrate culturally appropriate practice*	23/30
Assess consumer health needs*	27/30
Provide appropriate intervention for Consumers*	28/30
Keep records in a clear, concise and accurate format*	26/30
Practice safely and ethically*	28/30
Comply with legal responsibilities*	25/30
Promote the health and wellness of consumers, families and communities*	24/30
Promote individual professional growth*	20/30
Evaluate consumer health needs	18/30
Manage therapeutic interventions	15/30
Assessment of medical health status	10/30
Healthcare programs	15/30
Research	7/30
Custody	4/30
Language	3/30
Housekeeping	6/30

* New Zealand Recommended Core Competency (NZRCC)

It was assessed that only those NZRCC core competencies were present in at least two-thirds of this sample (≥ 20). These competencies that were included in fewer than two thirds of documents included 'management of therapeutic interventions' (15/30) and 'assessment of medical health status' (10/30). Convergent validity was supported in that only the 10 New Zealand recommended core competencies were present in at least two-thirds of this sample. The level of interrater agreement on whether a New Zealand core competency was present or absent in each sample document was 95%.

This exercise gave credence to the work of the National Mental Health Workforce Development Coordinating Committee (NMHWDC, 1999), as their recommended core competencies matched the generally accepted core competencies worldwide. In addition, it allowed the researcher in this study to proceed and develop a questionnaire based on the NMHWDC (1999) core competencies. The aim was to construct an instrument that could accurately evaluate these competencies through two distinct facets of competence-skills and attitudes.

Design and Instruments

This study was intended to assess the competency of the mental health support worker through three salient domains-skill, attitude and work environment.

Assessment of skills

The assessment of support worker skills was based on the performance criteria that accompanied each of the ten NMHWDC recommended core competencies. The competencies themselves had evidence of convergent validity through the previous exercise that compared them favourably to other indices of recommended core competencies.

Skills measure

The items developed to evaluate the performance criteria were framed in three different ways:

- assessment of existing knowledge on a specific skill

- assessment to whether training had been received with regard to a particular skill
- assessment of their work practice on a particular skill.

Responses to items were true or false.

There are 66 performance criteria that are associated with the ten core competencies. A total of 84 items were developed for the skill portion of this assessment instrument. The disparity between these two numbers is due to the fact that some core competencies simply required a larger number of items for adequate assessment. For example, the core competency that required the worker to ‘demonstrate knowledge and understanding of mental health, mental illness and mental health services’ had two performance criteria, as did the core competency that required the worker to ‘keep records in a clear, concise and accurate format’. The number of items deemed necessary to accurately assess the former was ten, but for the latter, given its straightforward nature, only two.

How an item was framed was dependent on how the particular performance criterion was worded. The first core competency in the NMHWDC (1999) index is ‘Demonstrate knowledge and understanding of mental health, mental illness and mental health services’. This has two performance criteria that specify that the worker should be able to demonstrate such knowledge and integrate knowledge of subjects such as the influence of societal and cultural beliefs on mental health practice. Skills assessment items for these criteria were developed to evaluate workers existing knowledge in these areas. Information for item construction for these particular criteria was drawn from a variety of sources including Davison and Neale (1998), Ellis and Collings (1997) and Kaplan and Sadock (1998). Ten items were assigned to this competency.

The second core competency is ‘Communicate effectively’ which has fourteen performance criteria. These performance criteria include the worker being able to communicate appropriately with consumers, their families and colleagues, principles of informed consent, teamwork and the use of reflective practice. Fourteen items were developed to evaluate worker skills in these areas. The items were framed to assess

existing knowledge, worker training and work practice. In most cases, these items were constructed by reframing the performance criteria into a statement that reflected worker knowledge, training and practice. An example of this reframing procedure is shown in the construction of an appropriate item for the performance criterion-‘Liaise with family members and other resource persons/agencies. The item created for this criterion was-‘I liaise on behalf of clients with their families’. In addition to this reframing process, material was derived from Beutler, Machado, and Neufeldt (1994) and consultation with senior psychologists for knowledge based items.

The third competency is ‘Demonstrate culturally appropriate practice’ which has seven performance criteria. These include applying the Treaty of Waitangi principles to one’s work practice, awareness of the impact of mental health service on consumer beliefs and respect for other cultures. Twelve items were developed to evaluate worker skills in this area and were designed to reflect knowledge and work practice. These items were constructed either by reframing the criteria or generated by the researcher using the resources Nairn (1997) and Durie (personal communication, May 29, 2000).

The fourth competency is ‘Assess consumer health needs’ which has nine performance criteria. These include recommendations that the support worker should be able to carry out a basic mental health assessment, practice holistically and recognize the presence of mental disorder. Nine items were developed evaluating knowledge, training and work practice. The bulk of these items were constructed by reframing the performance criteria or generated by the researcher using the resource, Kaplan and Sadock (1998), for knowledge items.

The fifth core competency is ‘Provide appropriate intervention for consumers’ and it has eight performance criteria. These include using the recovery approach, managing difficult behaviour and administering cardiopulmonary resuscitation. Twelve items were created to evaluate the workers skills with regard to these criteria. These items reflected knowledge, training and practice. These items were constructed by reframing the criteria and employing other resources for items that evaluated worker’s knowledge including NMHWDCC (1999) and consultation with senior psychologists.

The sixth core competency is 'Keep records in a clear, concise and accurate format' and it has two performance criteria. These are maintaining consumer records in an accurate manner and meeting legal, organisational and consumer requirements. Three items relating to work practice were developed by the researcher to assess the criteria.

The seventh core competency is 'Practice safely and ethically' and there are four related performance criteria. These include ensuring consumer privacy, recognising safety dilemmas and participation in supervision. Four items were developed to evaluate these criteria in areas of knowledge and work practice. These were constructed by reframing the criteria to appropriate assessment statements. For example, the performance criterion 'ensure the consumer's and his/her family's right to privacy' was reframed to the item 'mentally ill individuals have forfeited the right to privacy'.

The eighth core competence is 'Comply with legal responsibilities' which has five performance criteria, all related to legal responsibilities. Five items were developed to evaluate these criteria, four were knowledge based and the other examined training. The knowledge-based items were constructed using the resource Gamby (1995); the training item, by reframing the criterion.

The ninth core competency is 'Promote the health and wellness of consumers, families and communities' and has seven performance criteria. These include promotion of community mental health initiatives, supporting consumer families and applying the recovery approach to one's work practice. Six items were developed and all relate to work practice. The smaller number of items compared to criteria was due to one criterion 'use communication skills appropriate to the individual or group' having already been assessed for the core competence 'Communicate effectively'. These were all constructed by reframing the criteria to produce suitable assessment items.

The tenth and final core competency is 'Promote individual professional growth' and this has eight performance criteria. These are related to the worker's participation in education and career development and their ability to recognize their roles and responsibilities. Nine items were developed to assess these criteria relating to work

practice. All items were constructed by reframing the criteria into appropriate assessment statements.

Assessment of attitudes

As with the skills items, assessment of attitudes was based on the performance criteria that accompanied the NMHWDCC (1999) core competencies.

Attitudes measure

Attitude assessment responses were formatted on a 5-point Likert scale with the categories-strongly disagree (1), disagree (2), no opinion (3), agree (4) and strongly agree (5). Items were developed to evaluate the performance criteria were framed to assess participant attitudes regarding their knowledge and work practice.

The items were constructed in a way that participant's selection of a response could be coded as a helpful or an unhelpful attitude based on the performance criteria. For example, the item developed to assess the performance criterion 'Apply the principles of the Treaty of Waitangi to mental health services' was 'The Treaty of Waitangi has little relevance in the day-to-day care of Maori clients'. According to the performance criterion, the helpful attitude towards this item would be strongly disagree or disagree. All items in this attitude scale were framed in this fashion; that is there were 'right' and 'wrong' answers according to the performance criteria laid down by the NMHWDCC (1999).

There are 66 performance criteria that are associated with the ten core competencies. A total of 73 items were developed for the skill portion of this assessment instrument. As with the skills measure, the disparity between these two numbers is due to the fact that some core competencies simply required a larger number of items for adequate assessment.

The core competency 'Demonstrate knowledge and understanding of mental health, mental illness and mental health services' had two performance criteria and was

evaluated by ten attitude assessment items. These items were constructed either by reframing the criterion or generated by the researcher using Disley (1997). An example of the use of the latter is demonstrated by the item 'I believe that Government economic policy can influence the population's mental health status'.

The core competency 'Communicate effectively' had fourteen performance criteria and was evaluated by fourteen attitude assessment items. These items were all related to work practice and were constructed by reframing the criteria or generated by the researcher through consultation with senior psychologists. An example of item generation through consultation is 'I believe that supportive relationships are not possible with some clients-e.g. hostile individuals'.

The core competency 'Demonstrate culturally appropriate practice' had seven performance criteria and was evaluated by seven attitude assessment items. These were related to work practice and knowledge and were constructed by reframing the criteria or generated by the researcher based specifically on the criteria. An example of item generation by the researcher is 'I believe my own background is bound to affect how I interact with clients'.

The core competency 'Assess consumer health needs' had nine performance criteria and was evaluated by nine attitude assessment items. These were related to work practice and knowledge and were constructed by reframing the criteria or generated by the researcher. An example of item generation using the reframing process is shown by the item 'only trained professionals should carry out mental health assessment of clients'. This was reframed from the performance criterion 'undertake a basic mental health assessment'.

The core competency 'Provide appropriate intervention for consumers' had eight performance criteria and was evaluated by eight assessment items. These were related to work practice and knowledge and were constructed by reframing the criteria or generated by the researcher based specifically on the criteria. An example of the latter is represented by the item 'I believe in reality there is little we can do to rehabilitate clients'.

The core competency 'Keep records in a clear, concise and accurate format' had two performance criteria and was evaluated by two assessment items. These were related to work practice and knowledge and were constructed by the researcher. An example of this type of item generation is shown by the item 'I believe that client notes are of little value in the care of clients'.

The core competency 'Practice safely and ethically' had four performance criteria and was evaluated by four attitude assessment items. These were related to work practice and knowledge and were constructed by reframing the criteria or generated by the researcher and by consultation with senior psychologists (e.g. 'I believe that anything a client tells me in private must remain confidential').

The core competency 'Comply with legal responsibilities' had five performance criteria and was evaluated by five attitude assessment items. These were related to work practice and knowledge and were constructed by reframing the criteria or generated by the researcher using the resource Gamby (1995). An example of the use of the latter is demonstrated by the item 'I am willing to be assigned legal responsibility for a client's treatment'.

The core competency 'Promote the health and wellness of consumers, families and communities' had seven performance criteria and was evaluated by six attitude assessment items. The smaller number of items compared to criteria was due to one criterion 'use communication skills appropriate to the individual or group' having already been assessed for the core competence 'Communicate effectively'. Items were related to work practice and knowledge and were constructed by reframing the criteria or generated by the researcher using other resources NMHWDC, (1999). An example of the use of the latter is demonstrated by the item 'I believe the recovery approach is the optimal approach for mentally ill clients'.

The final core competency 'Promote individual professional growth' had eight performance criteria and was evaluated by eight attitude assessment items. These were related to work practice and were constructed by reframing the criteria or generated by the researcher (e.g. 'I feel stupid asking supervisors for help').

This process resulted in a total of 73 items being developed for the attitude portion of this assessment instrument.

Survey Review

The skills and attitudes survey (Appendix F) was reviewed by three experts in the field of community mental health and mental health support worker training. This exercise involving acknowledged experts reviewing a newly developed instrument is a standard practice in establishing an instrument's content validity (Ponterotto, 1996). In addition, four mental health support workers were also requested to fill out and review the initial instrument and to provide feedback. This process proved to be very useful in the rewording of several items where there was perceived ambiguity. There was consensus amongst the experts regarding the appropriateness of the survey items, although a little unease was expressed over the length of the measure. However, the feedback from the support workers (equivalent to potential participants) indicated that the length of the measure was not of undue concern.

Assessment of the work environment

Work environment measure

The final measure employed in this study's assessment of mental health support worker competence was the Ward Atmosphere Scale-Real Form (WAS-R) (Moos, 1996). This self-report measure was used to provide information about the therapeutic milieu derived from staff perceptions of their work environment. This type of data was intended to fulfil the premise that the characteristics of the work environment have a demonstrable influence on both staff job performance, attitudes and morale (Moos, 1997).

This type of measure also was utilized to comply with methodological considerations that recommend that analysis of the treatment milieu should be a prerequisite when evaluating psychiatric treatment programmes (Pfeiffer, 1990).

The Ward Atmosphere Scale (WAS-R) (Moos, 1996) is a 100 item self report scale developed for use by both staff and patients in a variety of substance abuse and psychiatric programs (Moos, 1997). It has been a valuable tool in the assessment of the social climate of these programs, in their monitoring and improvement, and in evaluation of their implementation.

The WAS-R is designed to embody therapeutic programmes in terms of three dimensions-relationship, personal growth and system maintenance. These three dimensions are measured by ten subscales that examine different aspects of the treatment programme. Table 2 lists these subscales with accompanying dimension descriptions, and this was adapted from Moos (1996).

Table 2

Adapted WAS Subscale and Dimension Description

Relationship Dimensions	
1. Involvement	the activity and energy level of clients in the programme
2. Support	the extent of client support for each other each other and how helpful the staff are to clients
3. Spontaneity	the extent to which the programme promotes the expression of emotions by both clients and staff
Personal Growth Dimensions	
4. Autonomy	the extent to which clients are involved in making decisions for themselves
5. Practical Orientation	how much practical skills are learnt and how clients are readied for leaving the programme
6. Personal problems Orientation	how much clients seek to comprehend their emotions and personal difficulties
7. Anger and Aggression	the extent to which clients argue with each other and staff and show aggressive behaviour
System Maintenance Dimensions	
8. Order and Organization	the emphasis that is placed on order and organization in the programme
9. Programme Clarity	how much clients know about what their day-to-day routine is and the preciseness of programme regulations and procedures
10. Staff Control	the level of control staff use in the care of clients

Moos (1997) reported that the WAS-R subscales showed an internal consistency averaging .71, with low to moderate subscale intercorrelation, supporting the view that these scales measure separate though related aspects of the treatment

environment. In addition, Moos (1997) reports adequate test-retest reliability for the subscales that varied from .68 for practical orientation to .79 for involvement.

In this study, it was necessary to alter slightly some of the wording in the WAS-R. The WAS-R was initially developed to analyse hospital programmes and the participants in this study were based in community settings. For example, the word 'patient' is not applicable in the community setting and was replaced by 'client.

Participants

The participants in this study were mental health support workers who were employed in supported/sheltered housing projects in the community. There are a large number of mental health support workers employed by housing providers although current official figures are not available. The most recent stocktake of mental health services in New Zealand stated the figure of non-clinical staff working in the community was 578, though it did not specify in what capacity these workers were employed (Ernst and Young, 1996). This figure has increased at least threefold since then. This statement is based on contact with current providers who supplied estimates of the numbers of staff who were potential participants in this study (see next section for details).

The current research selected community residential support workers as opposed to other non-professional mental health support staff because the community residence was an environment that was similar for all these workers. This excludes the many support staff such as fieldworkers who work in a variety of settings other than community residences. Their work settings are very different to community residences and consequently these workers would not provide a valid comparison with the residential support worker.

The number of participants was 121, 30 males, 85 females (and six who did not report gender). Participant age ranged from 21 to 66 years old, with similar numbers in their twenties, thirties, forties and above the age of fifty (mean=42, S.D.=10.22). The participants had a variety of ethnic backgrounds, with New Zealand Europeans

constituting the largest percentage (n=72, 59%). The only other ethnic group that reached a double percentage figure was New Zealand Maori (n=15, 12.3%). The level of education of participants was quite evenly split between those with a school education or less (n=36, 29.6%), a trade or professional certificate or diploma (n=35, 28.7%) and a university education (n=42, 34.4%). The participant's years of experience as mental health workers ranged from 1 to 26 years, although most (n=91, 74.7%) had worked for six years or less. The majority of participants were fulltime workers (n=83, 68%) and the most common work shift was days (n=71, 58.2%). The most common disorder reported for clients was schizophrenia (n=49, 40.2%).

All the demographic data for these participants is located in Appendix G.

Recruitment

The recruitment of participants for this study had to be carried out with the cooperation of their employers. There are a very large number of community mental health residential providers in New Zealand and there does not appear to be any complete register of these providers. Efforts to obtain a list of providers from various sources such as the Health Funding Authority, Mental Health Foundation and Mental Health Commission were not successful. Eventually, a list of over 300 providers was procured from the Ministry of Health that had provider name, address and phone number.

Of the 303 providers on this list, 142 operated a community mental health residential programme, the others either offering some other service or no longer existing. Each provider was contacted by phone with the researcher requesting the Chief Executive's permission to survey the staff. Generally, the response from providers was positive with 69 giving permission for their staff to take part in the study. This process resulted in a potential number of 969 participants. A list of these providers with numbers of support staff is given in Appendix H.

Thirty-four surveys were returned by providers who decided that the survey was not appropriate for their staff. This reduced the number of potential participants to 935. Of these, 121 responded giving a return rate of 13%.

Procedure

The surveys were sent out to each provider for distribution amongst their staff. The contact person at each organization was telephoned two weeks after the surveys were posted to make sure they had arrived and to answer any queries. Following the return of first batch of twenty surveys, the researcher altered the title of the 'Ward Atmosphere Scale' to the 'House Atmosphere Scale' for the 100 staff of a provider that was late coming onboard the study. The rationale for this was that many participants seemed to ignore the WAS-R when they saw the word 'Ward', presumably thinking the scale was not applicable to their community residential work. The benefit of this change was manifested by the completion of all 'House Atmosphere Scales' in returned surveys from the staff of this provider.

Plan of statistical analysis

There were three domains (skills, attitudes and work environment) that were deemed to constitute the construct 'competence' and analysis of each was carried out separately. The survey instruments for the domains, skills and attitudes each had ten individual subscales as described above and the strategy for statistical analysis for these instruments was practically identical.

First, overall scores on the skills measure were aggregated, frequencies calculated and descriptive statistics obtained. The scores were subjected to between groups analysis (*t* test and oneway ANOVA) using demographic groups as the independent variables. The same analyses were carried out on the 10 individual skill subscale scores. Any specific item on the skills measure where the percentage of incorrect responses was over 30% was itself subject to between groups analysis. The rationale

for this single item analysis was to endeavour to determine what factors may have caused such a high failure rate on a particular item.

The same analyses were carried out on scores from the attitude measure and its subscales. However, regarding single item analysis, the criterion here was the percentage of correct responses being 65% or less taking into account there was a 'no opinion' response on this scale.

Despite the rigorous review by both mental health experts and support workers before the survey dissemination, the responses to ten of the attitude items seemed to indicate participant confusion as a result of how these items were worded. Because of these ambiguities it now was felt that these particular items did not adequately measure what they were originally intended to. Therefore items (5), (10), (21), (23), (36), (38), (44), (50), (53) and (71) were removed from the attitude scale. This item removal meant that the scale now consisted of a total of 63 items. In addition two items on the skill measure were deemed more suitable as attitude assessment items. These were items 'I believe that dislike of a client impedes effective care' and 'I am uncomfortable with the beliefs and values of some clients'. Given the time constraints for this research, it was not possible to relocate or replace these items.

Regarding assessment of the work setting the Ward Atmosphere Scale subscale scores were aggregated, frequencies calculated and descriptive statistics obtained.

All analyses were performed by SPSS and were conducted with alpha set at the conventional level (i.e., $p < 0.05$). While this inflates the potential for Type I error because of the number of analyses, given the exploratory nature of this study, the alpha level was deemed appropriate (i.e. some protection against Type II error).

Results

Order of Presentation

The results of the skills assessment are presented first. The results and analysis of aggregated skill scores is followed by individual core competency skill scores and analysis. Attitude results are presented next. The results and analysis of aggregated attitude scores is followed by individual core competency attitude scores and analysis. Finally the results and analysis of the Work Environment assessment are presented.

Skills Assessment

The questionnaire developed specifically for this study was designed in such a fashion as to determine whether the respondents had the requisite knowledge, training and attitudes to carry out their job in a competent manner. The assessment of skills was carried out using an 84-item instrument with true/false responses as described in the Method section. As there was only one correct answer for each item this allowed the aggregation of scores for the skills portion of this survey. If a participant did not respond to a particular item, the response was coded as incorrect. This allowed all responses to this part of the questionnaire to be included in all analyses.

Aggregation of skill scores

Each participant's score on the skills portion of this questionnaire was aggregated to give a total score. There were 84 items in the skills section and therefore the maximum score a participant could achieve was 84 (1=correct response, 0=incorrect response). The mean score for the skills questionnaire= 63.26(75.3%), standard deviation=7.99, median=65(77.3%) and mode 71(84.5%). Scores ranged from 37(44%) to 77(91.6%) and the frequencies of the aggregated skill scores are shown in Figure 2.

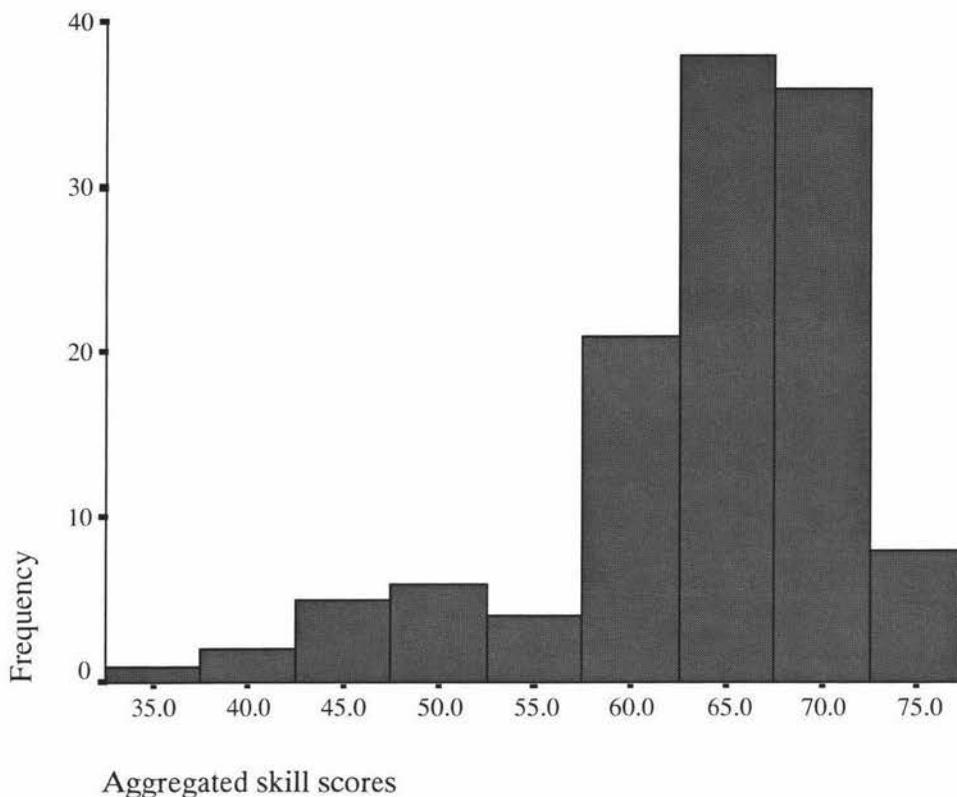


Figure 2. Frequency of aggregated skill scores of participants.

Reliability

The scale reliability (alpha coefficient) of 0.9064 was acceptable according to standard psychometric criteria.

Group Comparison

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. Each time a *t* test was carried out, an F test of sample variances was performed for each comparison. If the probability of F was $> .05$, it was assumed that the sample variances were equal and the *t* statistic reported was that based on pooled variance estimates. If the probability of F was $< .05$, then it was assumed that sample variances were unequal and the *t* statistic reported was that based on separate variance

estimates. An alpha level of .05 was selected for the *t* test. The results of this analysis are shown in Table 3.

Table 3.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on aggregated skill scale.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	63.94	8.20	.676	106	.501
≥45	50	64.90	6.08			
Gender Male	29	65.93	5.41	1.399	111	.165
Female	84	63.71	7.90			
Experience <4yrs	49	63.85	8.05	.578	106	.565
≥4yrs	59	64.67	6.70			
Job status Fulltime	82	65.28	6.01	-2.382	111	.019
Other	31	61.64	9.81			
Shift Day	71	65.14	7.37	-1.633	110	.105
Other	41	62.78	7.35			

Workers who were employed fulltime scored statistically significantly higher on this subscale than those who worked as part-time or on-call casual. No statistically significant differences in scores were found between groups in the variables age, gender, experience and job shift regarding scores on this subscale.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. Post hoc analyses, using Tukey's honestly significant difference (HSD), were conducted on the significant between-group effects. Workers who had a university degree (n=42, mean=67.11, S.D.=4.61) and workers who had a trade or professional certificate/diploma (n=34, mean=64.8, S.D.=7.6) scored significantly higher on this scale than those workers who had a high school education or less, (n=35, mean=60.3, S.D.=8.49), $F(2, 110)=9.192, p=.000$. Regarding training, workers who trained for their job at university (n=19, mean=67.8, S.D.=4.72) or had a trade certificate or diploma (n=57, mean=65.6, S.D.=6.35) scored

significantly higher on this scale than the workers who had been trained in-house, (n=33, mean=60.9, S.D.=8.26), $F(2,108)=7.74$, $p=.001$.

Specific skill core competency status of participants

Core Competency 1 Demonstrate knowledge and understanding of mental health, mental illness and mental health services.

As there were 10 items in this subscale, the maximum score a participant could achieve was 10 (1=correct, 0=incorrect). The mean = 6.7(67%), standard deviation= 1.96, median = 7(70%) and mode = 7(70%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of the *t*-test analysis are represented in Table 4.

Table 4.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 1.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)	
Age	<45	58	6.91	1.90	-.147	106	.883
	≥45	50	6.86	1.87			
Gender	Male	30	7.43	1.71	2.177	113	.032
	Female	85	6.57	1.89			
Experience	<4yrs	50	7.16	1.81	-1.296	108	.198
	≥4yrs	60	6.71	1.76			
Job status	Fulltime	83	6.78	1.81	.154	113	.878
	Other	32	6.84	2.08			
Shift	Day	71	6.85	1.87	-.315	112	.754
	Other	43	6.74	1.91			

The influence of gender on subscale scoring did have a statistically significant impact. Male workers scored significantly higher on this subscale compared to female workers. There were no other statistically significant differences.

ANOVA

Differences involving level of education and specific training for this job was explored using one-way analysis of variance (ANOVA). The effect of education was analysed by comparing those participants with a high school education or less (n=36, mean=6.4, S.D.=1.94), a trade or professional certificate or diploma (n=35, mean=6.7, S.D.=2.15) and a university education, which includes currently studying at a tertiary institution (n=42, mean=7.3, S.D.=1.52). Specific training for this type of work was explored by comparing the participants who have a professional certificate or diploma (n=58, mean=6.6, S.D.=2.15), a university degree (n=19, mean=7.4, S.D.=1.16) and those who have been trained in-house (n=34, mean=6.7, S.D.=1.74).

No statistically significant results were found between these groups with regards to the first competency subscale ($p's > .05$).

Individual item analysis

Individual items that had over 30% incorrect responses were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (2) 'Clients with bipolar disorder often hear voices' had a failure rate of 30.3%. The less experienced workers (<4 years), (n=50, 84% correct, S.D.=0.37) scored significantly higher than the more experienced workers (≥ 4 years), (n=60, 67% correct, S.D.=0.48), $t(108)=-2.101$, $p=.0038$. In addition, younger workers (<45), (n=58, 83% correct, S.D.=0.38) scored significantly higher on this item than the older workers (≥ 45), (n=50, 66% correct, S.D.=0.48), $t(106)=-2.025$, $p=.045$.

Question (3) 'Anxiety disorders are the most common mental disorder in New Zealand' had a failure rate of 41%. The less experienced workers (<4 years), (n=50,

50% correct, S.D.=0.50) scored significantly less than the more experienced workers (≥ 4 years), ($n=60$, 72% correct, S.D.=0.45), $t(108)=-2.384$, $p=.019$.

Question (7) 'Poverty is associated with poor mental health' had a failure rate of 49.2%. Participants with a university education ($n=42$, 64% correct, S.D.=0.48) scored significantly higher than participants with a high school education or less ($n=36$, 36% correct, S.D.=0.49), $F(2,112)=3.332$, $p=.039$.

Question (9) 'People who see visions are experiencing a psychotic episode' had a failure rate of 34.4%. The less experienced workers (<4 years), ($n=50$, 82% correct, S.D.=0.39) scored significantly higher than the more experienced workers (≥ 4 years), ($n=60$, 60% correct, S.D.=0.49), $t(108)=-2.2258$, $p=.012$. Participants with a university education ($n=42$, 86% correct, S.D.=0.35) scored significantly higher than both those with a trade or professional certificate ($n=35$, 60% correct, S.D.=0.50) and a high school education or less ($n=36$, 56% correct, S.D.=0.50), $F(2,112)=5.147$, $p=.007$.

All other comparisons on these items were not significant.

For these items all group comparisons were not significant: Qu.4. Recurrent thoughts of death/suicide are a common feature of schizophrenia, Qu.6. Females are twice as likely to suffer from depression as males, Qu.8. Lonely people are at greater risk of developing a mental disorder.

Core Competency 2 Communicate effectively.

As there were 14 items in this subscale, the maximum score a participant could achieve was 14 (1=correct, 0=incorrect). The mean = 10.9(77.8%), standard deviation=2.47, median = 11.5(82%) and mode = 12(85.7%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 5.

Table 5.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 2.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)	
Age	<45	58	10.94	2.35	.350	106	.727
	≥45	50	11.10	2.12			
Gender	Male	30	11.13	1.77	.307	113	.759
	Female	85	10.98	2.35			
Experience	<4yrs	50	11.02	2.08	-.008	108	.994
	≥4yrs	60	11.01	2.39			
Job status	Fulltime	83	6.78	1.81	-1.40	113	.164
	Other	32	6.84	2.08			
Shift	Day	71	11.12	2.14	-.673	112	.503
	Other	43	10.83	2.35			

As seen, there were no statistically significant differences.

ANOVA

Analyses here showed statistically significant differences between groups with differing levels of education and training. Workers with a university education (n=42, mean=11.9, S.D.=2.0) scored significantly higher on this subscale than workers with a high school education or less, (n=36, mean=10.1, S.D.=2.3), $F(2,110)=7.03$, $p=.001$. Regarding training, workers with a university degree (n=19, mean=11.8, S.D.=2.27) scored significantly higher on this subscale than workers who were trained in-house, (n=34, mean=10.3, S.D.=2.29), $F(2, 108)=3.6$, $p=.031$.

Individual item analysis

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

No significant differences ($p's > .05$) were found between groups regarding scores on the two applicable items: Qu.15. I believe dislike of a client impedes effective care, Qu.24. I have been trained to use reflective practice techniques to alter my work practice.

Core Competency 3 Demonstrate culturally appropriate practice

As there were 12 items in this subscale, the maximum score a participant could achieve was 12 (1=correct, 0=incorrect). The mean = 10.2(85%), standard deviation=1.7, median = 11(91.6%) and mode = 11(91.6%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 6.

Table 6.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 3.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	10.13	1.52	1.286	106	.201
≥45	50	10.48	1.18			
Gender Male	30	10.00	1.57	-1.407	113	.162
Female	85	10.41	1.30			
Experience <4yrs	50	10.40	1.62	-.667	108	.500
≥4yrs	60	10.21	1.20			
Job status Fulltime	83	10.24	1.39	.790	113	.431
Other	32	10.46	1.36			
Shift Day	71	10.32	1.27	-.166	121	.868
Other	43	10.27	1.57			

As seen, there were no statistically significant differences.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale ($p's > .05$).

Individual item analysis

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (30) 'I am familiar with the various Maori models of wellness e.g. 'Te Whare Tapa Wha' had a failure rate of 39.3%. Older workers (≥ 45), ($n=50$, 78% correct, S.D.=0.42) scored significantly higher on this item than the younger workers (< 45), ($n=58$, 43% correct, S.D.=0.50), $t(106)=3.899$, $p=.000$. In addition participants with a professional certificate or diploma specific to this field ($n=58$, 72% correct, S.D.=0.45) scored significantly higher on this item than workers who had been trained in-house ($n=34$, 41% correct, S.D.=0.50), $F(2,110)=4.677$, $p=.011$.

Question (36) 'I am uncomfortable with the beliefs and values of some clients' had a failure rate of 37.7%. Workers who had trained in-house ($n=34$, 79% correct, S.D.=0.41) scored significantly higher on this item than workers with a professional certificate or diploma specific to this field ($n=58$, 53% correct, S.D.=0.50), $F(2,110)=3.196$, $p=.045$.

All other comparisons on these items were not significant.

Core Competency 4 Assess consumer health needs.

As there were 9 items in this subscale, the maximum score a participant could achieve was 9 (1=correct, 0=incorrect). The mean =6.5(72.2%), standard deviation=1.53, median=6(66.6%) and mode=6(66.6%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 7.

Table 7.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 4.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	6.55	1.48	.102	106	.919
≥45	50	6.58	1.38			
Gender Male	30	6.60	1.10	.155	113	.877
Female	85	6.55	1.53			
Experience <4yrs	50	6.56	1.37	-.037	108	.970
≥4yrs	60	6.55	1.43			
Job status Fulltime	83	6.74	1.27	-2.238	113	.027
Other	32	6.09	2.11			
Shift Day	71	6.73	1.43	-1.563	112	.121
Other	43	6.30	1.40			

There was a statistically significant difference found between the subscale scores of fulltime workers and part-time/ on-call casual workers. The fulltime workers scored significantly higher on this subscale than their counterparts. No statistically significant differences in scores were found between other groups.

ANOVA

No significant difference was found with respect to the category level of education in these groups regarding scores on this subscale ($p > .05$). However, regarding training, workers with a professional certificate/diploma ($n=58$, mean=6.8, S.D.=1.29), and workers with a university degree ($n=19$, mean=7.2, S.D.=1.31) scored significantly higher on this subscale than workers who had in-house training, ($n=34$, mean=5.9, S.D.=1.28), $F(2,108)=8.81, p=.000$.

Individual item analysis

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (37) 'I have been trained to carry out a basic mental health assessment of clients' had a failure rate of 37.7%. Workers who had received a certificate or diploma in a field related to mental health support work ($n=58$, 74% correct, S.D.=0.44) scored significantly higher on this item than those workers who had been trained in-house, ($n=34$, 47% correct, S.D.=0.51), $F(2,110)=3.98, p=.021$.

Question (44) 'I have been trained to recognize the presence of alcohol and drug problems' had a failure rate of 31.1%. Workers who had received a certificate or diploma in a field related to mental health support work ($n=58$, 81% correct, S.D.=0.40) scored significantly higher on this item than those workers who had been trained in-house, ($n=34$, 53% correct, S.D.=0.51), $F(2,110)=4.271, p=.016$.

All other comparisons on these items were not significant.

For these items all group comparisons were not significant ($p > .05$): Qu.38. I assess the needs of family members who are affected by my client's illness, Qu.39. Suicide in mentally ill clients is associated with a history of self-harm.

Core Competency 5 Provide appropriate intervention for consumers.

As there were 12 items in this subscale, the maximum score a participant could achieve was 12 (1=correct, 0=incorrect). The mean=7.9(65.8%), standard deviation=1.75, median=8(66.6%) and mode=8(66.6%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 8.

Table 8.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 5.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	57	7.92	1.69	.364	105	.716
≥45	50	8.04	1.38			
Gender Male	29	8.20	.940	.932	112	.353
Female	85	7.89	1.71			
Experience <4yrs	49	7.65	1.57	1.823	107	.071
≥4yrs	60	8.18	1.45			
Job status Fulltime	82	8.08	1.27	-1.227	112	.223
Other	32	7.68	2.11			
Shift Day	71	8.28	1.57	-2.893	111	.005
Other	42	7.42	1.39			

Workers who employed during the day scored statistically significantly higher on this subscale than those who worked evenings, nights or variable shifts. No statistically significant differences in scores were found between other groups.

ANOVA

No significant difference was found with respect to the category level of training in these groups regarding scores on this subscale ($p > .05$). However, with regards to education level, workers with trade or professional certificate ($n=35$, mean=8.31, S.D.=1.64) scored significantly higher on this subscale than workers with a high school education or less, ($n=35$, mean=7.37, S.D.=1.62), $F(2, 110)=8.81$, $p=.025$.

Individual item analysis

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (51) 'I have been trained to administer calming and restraint techniques when I encounter challenging and threatening behaviour' had a failure rate of 45.9%. Workers with professional certificates or diplomas ($n=58$, 74% correct, S.D.=0.44) scored significantly higher on this subscale than those with in-house training ($n=34$, 44% correct, S.D.=0.50) and those who had a university degree ($n=19$, 21% correct, S.D.=0.54), $F(2, 110)=11.22$, $p=.000$.

All other comparisons on this item were not significant.

For these items all group comparisons were not significant ($p > .05$): Qu.47. The value of the recovery approach has been shown in the institutional environment, Qu.48. Recovery means a client's return to full health, Qu.49. I have been trained to work with clients who have a dual diagnosis, Qu.56. I give clients their medication, Qu.57. Tardive dyskinesia can result from taking a wide range of medications.

Core Competency 6 Keep records in a clear concise and accurate format.

As there were 3 items in this subscale, the maximum score a participant could achieve was 3 (1=correct, 0=incorrect). The mean=2.8(93.3%), standard deviation=0.62, median=3(100%) and mode=3(100%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 9.

Table 9.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 6.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	2.86	.348	-.907	105	.367
≥45	49	2.77	.621			
Gender Male	30	2.90	.305	1.059	112	.292
Female	84	2.78	.561			
Experience <4yrs	50	2.80	.571	.136	107	.892
≥4yrs	59	2.81	.472			
Job status Fulltime	83	2.90	.335	-3.138	112	.002
Other	31	2.58	.764			
Shift Day	71	2.76	.572	1.461	111	.147
Other	42	2.90	.370			

Workers who employed during the day scored statistically significantly higher on this subscale than those who worked other shifts. No statistically significant differences in scores were found between other groups.

ANOVA

Differences between groups in the categories age, level of education, level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale.

Individual item analysis

No individual items had over 30% incorrect on this subscale. All item frequency scores are located in Appendix I.

Core Competency 7 Practice safely and ethically.

As there were 4 items in this subscale, the maximum score a participant could achieve was 4 (1=correct, 0=incorrect). The mean=3.62(90.5%), standard deviation=0.69, median=4(100%) and mode=4(100%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 10.

Table10.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 7.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	3.69	.654	.091	106	.928
	≥45	50	3.70	.505			
Gender	Male	30	3.76	.504	1.026	113	.307
	Female	85	3.63	.633			
Experience	<4yrs	50	3.62	.635	1.004	108	.318
	≥4yrs	60	3.73	.548			
Job status	Fulltime	83	3.66	.590	.197	113	.844
	Other	32	3.68	.644			
Shift	Day	71	3.71	.590	-.976	112	.331
	Other	43	3.60	.622			

As seen, there were no statistically significant differences.

ANOVA

Differences between groups in the categories age, level of education, level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale ($p's > .05$).

Individual item analysis

No individual items had over 30% incorrect on this subscale. All item frequency scores are located in Appendix I.

Core Competency 8 Comply with legal responsibilities.

As there were 5 items in this subscale, the maximum score a participant could achieve was 5 (1=correct, 0=incorrect). The mean was 2.2, median was 2, mode was 2, and standard deviation 1.12.

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 11.

Table 11.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 8.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	2.26	1.16	.296	106	.767
	≥45	50	2.32	.957			
Gender	Male	30	2.56	1.04	1.856	113	.066
	Female	85	2.14	1.09			
Experience	<4yrs	50	2.06	1.07	1.757	108	.082
	≥4yrs	60	2.41	1.04			
Job status	Fulltime	83	2.40	1.01	-2.552	113	.012
	Other	32	1.84	1.19			
Shift	Day	71	2.25	1.15	.011	112	.991
	Other	43	2.25	1.00			

Workers who were employed fulltime scored statistically significantly higher on this subscale than those who worked as part-time or on-call casual. No statistically significant differences in scores were found between other groups.

ANOVA

Differences between groups in the categories age, level of education, level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale ($p'>.05$).

Individual item analysis

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (67) 'A Duly Authorised Officer is either a medical doctor (e.g. a psychiatrist) or a clinical psychologist' had a failure rate of 51.6%. Male participants (n=30, 77% correct, S.D.=0.43) scored significantly higher than female participants (n=85, 41% correct, S.D.=0.50) on this subscale, $t(113)=3.487$, $p=.001$.

Question (69) 'The sanctity of the client/expert bond of confidentiality may be broadened to include family members in the case of Maori and other clients' had a failure rate of 47.5%. Older workers (≥ 45), (n=50, 64% correct, S.D.=0.48), scored significantly higher on this subscale than younger workers (<45), (n=58, 45% correct, S.D.=0.50), $t(106)=2.011$, $p=.013$.

Other comparisons involving these items were not significant.

For these items all group comparisons were not significant ($p's >.05$): Qu.68. A Special Patient can be forced to have electroconvulsive therapy (ECT), Qu.70. Families have the right to commit clients to psychiatric institutions.

Core Competency 9 Promote the health and wellness of consumers, families and communities.

As there were 6 items in this subscale, the maximum score a participant could achieve was 6 (1=correct, 0=incorrect). The mean=4.6(76.6%), standard deviation=1.57, median=5(83.3%) and mode=6(100%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 12.

Table 12.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 9.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	4.46	1.52	1.60	106	.111
	≥45	50	4.92	1.39			
Gender	Male	30	4.73	1.48	.125	113	.901
	Female	85	4.69	1.48			
Experience	<4yrs	50	4.38	1.61	1.903	108	.082
	≥4yrs	60	4.91	1.34			
Job status	Fulltime	83	4.93	1.30	-2.841	113	.005
	Other	32	4.09	1.72			
Shift	Day	71	4.87	1.36	-1.689	112	.094
	Other	43	4.39	1.62			

Workers who were employed fulltime scored significantly higher on this subscale than those who worked as part-time or on-call casual. No statistically significant differences in scores were found between other groups.

ANOVA

No significant differences between groups were found in the category education level regarding scores on this subscale ($p > .05$). However, those workers who trained at university ($n=19$, mean=5.0, S.D.=1.22) and workers with a professional certificate/diploma ($n=58$, mean=5.1, S.D.=1.20) scored significantly higher on this subscale than workers who had trained in-house ($n=34$, mean=3.9, S.D.=1.63), $F(2, 108)=10.29$, $p=.000$.

Individual item analysis

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (71) 'I implement individual lifestyle planning for my clients in accordance with the Treaty of Waitangi principles' had a failure rate of 39.3%. Workers who had

achieved a professional certificate or diploma in the field of mental health support (n=58, 72% correct, S.D.=0.45) scored significantly higher on this subscale than workers whose training was in-house (n=34, 47% correct, S.D.=0.51), $F(2,110)=3.105$, $p=.049$.

Question (76) 'I liaise with the staff at local drug and alcohol agencies' had a failure rate of 36.9%. Fulltime workers (n=83, 75% correct, S.D.=0.44) scored significantly higher than part-time/on-call casual workers (n=28, 43% correct, S.D.=0.50) on this subscale, $t(109)=3.204$, $p=.002$. In addition, those workers who had trained for this work via university (n=19, 84% correct, S.D.=0.37) scored significantly higher on this subscale than those who had trained in-house (n=34, 47% correct, S.D.=0.51), $F(2,110)=4.638$, $p=.012$.

Other comparisons involving these items were not significant ($p>.05$).

Core Competency 10 Promote individual professional growth.

As there were 9 items in this subscale, the maximum score a participant could achieve was 9 (1=correct, 0=incorrect). The mean=7.9(87.7%), standard deviation=1.6, median=8(88.8%) and mode=9(100%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of these analyses are shown in Table 13.

Table 13.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency skill subscale 10.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	8.15	.932	-.271	106	.787
≥45	50	8.10	1.18			
Gender Male	30	8.40	.968	1.85	113	.067
Female	85	7.97	1.11			
Experience <4yrs	50	8.12	.824	-.488	108	.627
≥4yrs	60	8.01	1.295			
Job status Fulltime	83	8.24	.957	-2.499	113	.014
Other	32	7.68	1.30			
Shift Day	71	8.21	.969	-1.679	112	.096
Other	43	7.86	1.24			

Workers who were employed fulltime scored statistically significantly higher on this subscale than those who worked as part-time or on-call casual. No statistically significant differences in scores were found between groups in the variables age, gender, experience and job shift regarding scores on this subscale.

ANOVA

No significant difference between groups was found in the category level of training regarding scores on this subscale ($p>.05$). However, workers educated at university ($n=42$, mean=8.4, S.D.=0.70) and workers with a professional certificate/diploma ($n=35$, mean=8.2, S.D.=0.89) scored significantly higher on this subscale than workers with a high school education or less ($n=36$, mean=7.5, S.D.=1.42), $F(2, 110)=7.17$, $p=.001$.

Individual item analysis

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (82) 'Since starting in this area I have been promoted to a position that involves more responsibility in the area of client care' had a failure rate of 41.8%. Male workers (n=30, 77% correct, S.D.=0.43) have been more significantly more successful in promotion positions of increased client responsibility than females (n=85, 54% correct, S.D.=0.50), $t(113)=2.194$, $p=.03$.

Other comparisons involving this item were not significant ($p>.05$).

Summary of correlational analysis of skills subscales

Skills

As there were ten subscales, there were 45 inter-correlational relationships to be examined. The influence that being competent in one area is associated with competence in another is demonstrated by the number of instances where higher scores on one subscale were significantly associated with higher scores on another subscale. This occurred in 40 of these relationships with 35 of these associations significant at the 0.01 level.

Skills and Attitudes

There were 20 skills and attitudes subscales and, thus, the 90 relationships were examined. There were 36 significant relationships where increased skills were associated with a more helpful attitude, with 25 significant at the 0.01 level. The skill competencies where the largest numbers of associations with attitudes were represented were the areas of demonstration of culturally appropriate practice, promotion of the health and welfare of consumers/families/communities and promotion of individual professional growth.

Skills and Work Environment

There were 20 skills and work environment subscales and, thus, the 90 relationships were examined. Only six significant relationships were found with positive associations found between promotion of individual growth and autonomy ($r=.289$, $p<.05$), practical orientation ($r=.247$, $p<.05$) and personal problem orientation ($r=.232$, $p<.05$). Negative associations were found between the amount of staff control

and increased skill at communicating effectively ($r=-.269$, $p<.05$) and intervening appropriately ($r=-.253$, $p<.05$). In addition, order and organization was negatively associated with ability to intervene appropriately ($r=-.262$, $p<.05$).

Demographic variables

Increased level of education was associated positively with increased skills of knowledge ($r=.250$, $p<.01$), communication ($r=.365$, $p<.01$), promotion of individual growth ($r=.319$, $p<.01$), assessment ($r=.187$, $p<.05$) and intervention ($r=.186$, $p<.05$). The more experience a worker had was positively associated with the level of skill at promoting the health and welfare of consumers, families and communities ($r=.223$, $p<.05$).

The complete results of the correlational analysis are recorded in Appendix J.

Attitude Assessment

As with the skills assessment instrument, attitude assessment items were constructed in a manner that allowed responses to be coded as correct or incorrect. The potential responses on this scale were- strongly disagree, disagree, no opinion, agree and strongly agree. In this study the categories (a) 'strongly disagree' and 'disagree' and (b) 'strongly agree' and 'agree' were merged to score as correct or incorrect.

The scores in the attitude scale were recoded to correct (helpful attitude, in line with a competency) (2), no opinion (1), and incorrect (unhelpful attitude) (0).

Aggregation of attitude scores

Each participant's score on the attitudes portion of this questionnaire was aggregated to give a total score. There were 63 items in the skills section and therefore the maximum score a participant could achieve was 126 (2=correct response, 1=no opinion, 0=incorrect response). The mean score for the attitudes questionnaire= 94.7(75.1%), standard deviation=10.54, median=97(77%) and mode= 97(77%).

Scores ranged from 68 to 116 and the frequencies of the total skill scores are shown in Figure 3.

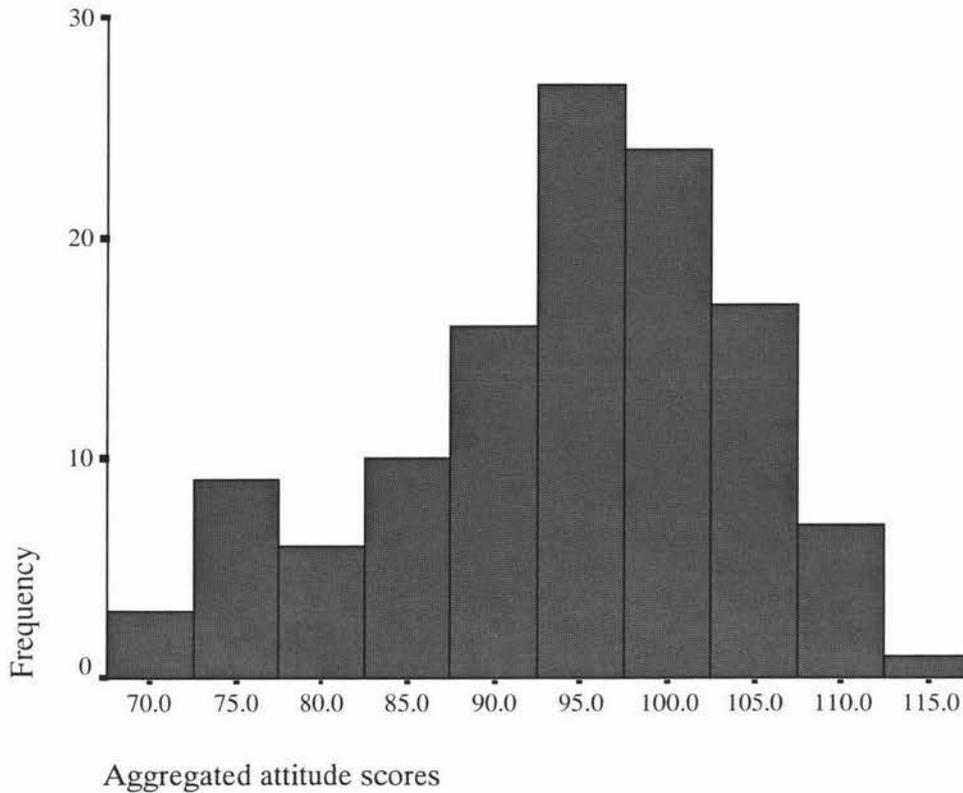


Figure 3. Frequency of aggregated attitude scores of participants.

Reliability

The scale reliability alpha coefficient of 0.8632 was acceptable according to standard psychometric criteria.

Group Comparison

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 14.

Table 14.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on aggregated attitude scale.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	96.91	10.17	-2.85	106	.005
≥45	50	91.32	10.10			
Gender Male	30	94.23	10.75	-.027	113	.978
Female	85	94.29	10.54			
Experience <4yrs	50	96.66	8.63	-2.477	108	.015
≥4yrs	60	91.80	11.40			
Job status Fulltime	83	96.12	9.82	-3.130	113	.002
Other	32	89.50	11.01			
Shift Day	71	95.74	10.10	-1.779	112	.078
Other	43	92.16	10.93			

Workers aged under 45 years old scored significantly higher on this subscale than the older workers. Workers with less experience (under four years) scored statistically than the more experienced workers (four or more years on this subscale). Fulltime workers scored significantly higher than part-time or on-call casual workers on this subscale. No significant differences in scores were found between other groups.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. Post hoc analyses, using Tukey's honestly significant difference (HSD), were conducted on the significant between-group effects. Significant differences between groups were found in the categories level of education and level of training regarding scores on this scale. Workers who were educated at university (n=42, mean=99.6, S.D.=6.9) and workers who had a trade certificate or diploma (n=35, mean=94.5, S.D.=10.4) scored significantly higher on this scale than workers who had a high school education or less, (n=36, mean=88.4, S.D.=11.2), $F(2,112)=13.59$, $p=.000$. Those workers whose specific training for their job was a university degree (n=19, mean=102.5, S.D.=5.5) scored significantly higher than both workers with a professional certificate or diploma (n=58, mean=94.3,

S.D.=10.1) and workers who had trained in-house, (n=34, mean=91.1, S.D.=10.86), $F(2,110)=8.47, p=.000$.

Specific attitude core competency status of participants

Core Competency 1 Demonstrate knowledge and understanding of mental health, mental illness and mental health services.

As there were 8 items in this subscale, the maximum score a participant could achieve was 16 (2=correct, 1=no opinion, 0=incorrect). The mean=11.3(70.6%), standard deviation=3.06, median=12(75%) and mode=14(87.5%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 15.

Table 15.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 1.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	12	3.00	-2.09	106	.039
	≥45	50	10.82	2.83			
Gender	Male	30	12.00	2.86	1.269	113	.963
	Female	85	11.21	2.94			
Experience	<4yrs	50	11.66	2.91	-1.145	108	.255
	≥4yrs	60	11.01	2.94			
Job status	Fulltime	83	11.89	2.59	-2.881	113	.005
	Other	32	10.18	3.41			
Shift	Day	71	11.43	3.17	.050	112	.960
	Other	43	11.46	2.51			

Workers who aged less than 45 years old scored significantly higher on this subscale than those who were 45 years or older. In addition, fulltime workers scored significantly higher on this subscale than part-time or on-call casual workers. There were no other significant differences.

ANOVA

Workers who had a university education ($n=42$, mean=12.7, S.D.=2.03) scored significantly higher on this subscale than those workers who had a high school education or less, ($n=36$, mean=10, S.D.=3.04), $F(2,112)=10.05$, $p=.000$. Regarding training, workers with a university degree ($n=19$, mean=13.4, S.D.=1.64) scored significantly higher than workers with a professional certificate ($n=58$, mean=11.3, S.D.=3.11) and workers trained in-house, ($n=34$, 10.7, S.D.=2.76), $F(2, 110)=5.97$, $p=.003$.

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (49) 'I believe that clients use their illness as an excuse for their behaviour' had a helpful attitude rate of 55.7%. Fulltime workers, ($n=83$, 70% correct, S.D.=0.87) displayed a significantly more helpful attitude than did part-time/on-call casual workers, ($n=28$, 48% correct, S.D.=0.92), $t(109)=2.356$, $p=.020$.

Question (54) 'I believe that we are over-sensitive to cultural factors in mental illness' had a helpful attitude rate of 62.3%. Participants who's training for this type of work was at university ($n=19$, 92% correct, S.D.=0.37) displayed a significantly more helpful attitude than those workers who trained in-house ($n=34$, 59% correct, S.D.=0.83), $F(2,110)=4.483$, $p=.013$. The effect of education was also apparent regarding scoring on this item. Participants with a university education ($n=42$, 78% correct, S.D.=0.63) and participants who had a trade or professional certificate ($n=35$, 78% correct, S.D.=0.78) displaying a significantly more helpful attitude than

participants who had a high school education or less ($n=36$, 56% correct, $S.D.=0.97$), $F(2,121)=4.618$, $p=.012$.

Other comparisons involving these items were not significant ($p's>.05$).

For these items all group comparisons were not significant ($p's>.05$): Qu.48. I believe that medication is the most effective way to treat clients, Qu.55.I believe that an individual's personality predisposes him or her to mental illness.

Core Competency 2 Communicate effectively.

As there were 14 items in this subscale, the maximum score a participant could achieve was 28 (2=correct, 1=no opinion, 0=incorrect). The mean=22.3(79.6%), standard deviation=3.19, median=24(85.7%) and mode=24(85.7%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 16.

Table 16.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 2.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	23.6	2.66	-3.45	106	.001
≥45	50	21.5	3.57			
Gender Male	30	22.56	3.43	-.047	113	.963
Female	85	22.60	3.35			
Experience <4yrs	50	23.12	2.90	-1.727	108	.087
≥4yrs	60	22.01	3.65			
Job status Fulltime	83	22.95	3.11	-1.874	113	.063
Other	32	21.65	3.80			
Shift Day	71	22.69	3.31	-.380	112	.705
Other	43	22.44	3.50			

Workers who aged less than 45 years old scored statistically significantly higher on this subscale than those who were 45 years or older. No significant differences in scores were found between other groups.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. Workers who were university educated (n=42, mean=24, S.D.=2.56) and workers who had a trade or professional certificate (n=35, mean =22.8, S.D.=2.73) scored significantly higher in this subscale compared to workers who had a high school education or less, (n=36, mean=20.9, S.D.=4.08) $F(2, 110)=8.81, p=.000$. Regarding training, workers with a university degree (n=19, mean=24.7, S.D.=1.29) scored significantly higher on this subscale than workers with in-house training, (n=34, mean=21.7, S.D.=3.93), $F(2,110)=5.22, p=.007$.

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (58) 'I talk to clients in the same manner that I talk to anyone (e.g. friends)' had a helpful attitude rate of 19.7%. Older participants (≥ 45), (n=50, 18% correct, S.D.=0.66) displayed a significantly less helpful attitude than younger participants (<45), (n=58, 37% correct, S.D.=0.87) on this item, $t(106)=-2.531$, $p=.013$.

Question (67) 'Clients provide the best solutions to their problems' had a helpful attitude rate of 48.4%. Older participants (≥ 45), (n=50, 51% correct, S.D.=0.91) displayed a significantly less helpful attitude than younger participants (<45), (n=58, 67% correct, S.D.=0.83) on this item, $t(106)=-1.937$, $p=.055$. The effect of training and education was apparent regarding scoring on this item. Workers trained at university (n=19, 84% correct, S.D.=0.67) displayed a significantly more helpful attitude than those trained in-house, (n=34, 52% correct, S.D.=0.87), $F(2,110)=3.813$, $p=.025$. Workers who had a university education (n=42, 72% correct, S.D.=0.74) displayed a significantly more helpful attitude than workers with a high school education or less, (n=36, 45% correct, S.D.=0.94), $F(2,121)=3.928$, $p=.023$.

Question (68) 'I believe that I should regularly demonstrate my understanding of how my clients feel directly to those clients' had a helpful attitude rate of 62.3%. Older participants (≥ 45), (n=50, 62% correct, S.D.=0.67) displayed a significantly less helpful attitude than younger participants (<45), (n=58, 82% correct, S.D.=0.69), $t(106)=-2.643$, $p=.009$. More experienced workers (≥ 4 years), (n=60, 64% correct, S.D.=0.88), also displayed a significantly less helpful attitude than the less experienced workers (<4 years), (n=50, 81% correct, S.D.=0.67), $t(108)=2.216$, $p=.09$. Workers who had a university education (n=42, 82% correct, S.D.=0.69) displayed a significantly more helpful attitude than workers with a high school education or less, (n=36, 57% correct, S.D.=0.87), $F(2,121)=4.590$, $p=.012$.

Other comparisons involving these items were not significant ($p'>.05$).

Core Competency 3 Demonstrate culturally appropriate practice.

As there were 6 items in this subscale, the maximum score a participant could achieve was 12 (2=correct, 1=no opinion, 0=incorrect). The mean=8.68(72.3%), standard deviation=2.40, median=9(75%) and mode=8(66.6%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 17.

Table 17.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 3.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	9.34	2.22	-3.14	106	.002
≥45	50	8.02	2.14			
Gender Male	30	8.53	2.22	-.729	113	.467
Female	85	8.88	2.26			
Experience <4yrs	50	8.98	2.13	-1.036	108	.627
≥4yrs	60	8.53	2.34			
Job status Fulltime	83	9.08	2.25	-2.291	113	.024
Other	32	8.03	2.08			
Shift Day	71	9.14	2.21	-1.929	112	.056
Other	43	8.32	2.14			

Workers who aged less than 45 years old scored statistically significantly higher on this subscale than those who were 45 years or older. In addition, fulltime workers scored statistically significantly higher on this subscale than part-time and on-call casual workers.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. No significant differences were found in the category level of training ($p's > .05$). Workers who had a university education ($n=42$, $mean=9.5$, $S.D.=1.99$) scored significantly higher on this subscale than those workers who had a high school education or less, ($n=36$, $mean=8.3$, $S.D.=2.29$), $F(2,112)=3.54$, $p=.032$.

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (4) 'I believe that too much emphasis on culturally appropriate care can hinder rehabilitation of clients' had a helpful attitude rate of 49.2%. Workers with a university education ($n=42$, 72% correct, $S.D.=0.77$) displayed a significantly more helpful attitude than both workers with a trade/professional certificate ($n=35$, 45% correct, $S.D.=0.95$) and those with a high school education or less, ($n=36$, 47% correct, $S.D.=0.95$), $F(2,112)=4.568$, $p=.012$.

Other comparisons involving this item were not significant ($p's > .05$).

For these items all group comparisons were not significant ($p's > .05$): Qu.1. The Treaty of Waitangi has little relevance in the day-to-day care of Maori clients, Qu.3. I believe that I must always liaise with a Maori client's family in order to provide appropriate care.

Core Competency 4 Assess consumer health needs.

As there were 8 items in this subscale, the maximum score a participant could achieve was 16 (2=correct, 1=no opinion, 0=incorrect). The $mean=11.1$ (69.3%), standard deviation= 2.64 , median= 11 (68.7%) and mode= 12 (75%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 18.

Table 18.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 4.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	11.65	2.42	-2.00	106	.48
	≥45	50	10.72	2.41			
Gender	Male	30	10.93	2.55	-.623	113	.535
	Female	85	11.25	2.42			
Experience	<4yrs	50	11.34	2.16	-.594	108	.554
	≥4yrs	60	11.06	2.58			
Job status	Fulltime	83	11.42	2.38	-1.760	113	.081
	Other	32	10.53	2.55			
Shift	Day	71	11.43	2.45	-1.321	112	.189
	Other	43	10.81	2.40			

As seen, no statistically significant differences in scores were found between groups.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale ($p's > .05$).

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

For these items all group comparisons were not significant ($p's > .05$): Qu.8. Only trained professionals should carry out mental health assessment of clients, Qu.13. I believe that assessment of client needs does not have to be a formal procedure, Qu.15. I believe that clients use their illness as an excuse for weird behaviour when their behaviour is not typical of their diagnosed disorder, Qu.72. I believe that observing my clients day-to-day is enough to accurately assess their needs.

Core Competency 5 Provide appropriate intervention for consumers.

As there were 7 items in this subscale, the maximum score a participant could achieve was 14 (2=correct, 1=no opinion, 0=incorrect). The mean=10.32(73.7%), standard deviation=1.98, median=10(71.4%) and mode=10(71.4%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 19.

Table 19.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 5.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)	
Age	<45	58	9.60	1.70	-.128	106	.898
	≥45	50	9.56	1.82			
Gender	Male	30	9.26	1.98	-1.096	113	.275
	Female	85	9.68	1.71			
Experience	<4yrs	50	10.10	1.31	-2.864	108	.005
	≥4yrs	60	9.15	2.01			
Job status	Fulltime	83	9.62	1.75	-.507	113	.613
	Other	32	9.43	1.88			
Shift	Day	71	9.67	1.54	-.612	112	.542
	Other	43	9.46	2.11			

Workers with less than four years experience scored statistically significantly higher on this subscale workers with four or more year's experience. No statistically significant differences in scores were found between other groups.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. No significant difference was found between groups in the category level of education ($p>.05$). Regarding training, workers who had a university degree ($n=19$, mean=10.5, S.D.=1.38) scored significantly higher on this subscale than workers who had trained in-house, ($n=34$, mean=9.1, S.D.=1.97), $F(2, 110)=3.80$, $p=.025$.

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (63) 'I can understand staff losing their temper in front of clients' had a helpful attitude of 63.1%. Workers with less experience (<4 years), ($n=50$, 78% correct, S.D.=0.79), displayed a significantly more helpful attitude than more experienced workers, (≥ 4 years), ($n=60$, 57% correct, S.D.=0.97), $t(108)=-2.4$, $p=.018$. Regarding training workers with a university education ($n=19$, 89% correct, S.D.=0.63) showed a significantly more helpful attitude than those workers who had trained in-house, ($n=34$, 54% correct, S.D.=1.00), $F(2,110)=3.718$, $p=.027$.

Other comparisons involving this item were not significant ($p's>.05$).

For these items all group comparisons were not significant ($p's>.05$): Qu.17. I find it difficult to work with dually diagnosed clients, Qu.18. I believe that some clients would be more suited to a hospital environment.

Core Competency 6 Keep records in a clear, concise and accurate format.

As there was one item in this subscale, the maximum score a participant could achieve was 2 (2=correct, 1=no opinion, 0=incorrect). The mean=1.77(88.5%), standard deviation=0.58, median=2(100%) and mode=2(100%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 20.

Table 20.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 6.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	1.81	.544	-.639	106	.524
	≥45	50	1.74	.599			
Gender	Male	30	1.70	.651	-.813	113	.418
	Female	85	1.80	.552			
Experience	<4yrs	50	1.86	.452	-1.576	108	.118
	≥4yrs	60	1.68	.676			
Job status	Fulltime	83	1.75	.616	.443	113	.659
	Other	32	1.81	.470			
Shift	Day	71	1.71	.658	1.271	112	.206
	Other	43	1.86	.413			

No statistically significant differences in scores were found between groups.

ANOVA

Differences between groups in the categories age, level of education, level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale (p 's>.05).

Individual item analysis

All individual items had more than 65% correct on this subscale.

Core Competency 7 Practise safely and ethically.

As there were 4 items in this subscale, the maximum score a participant could achieve was 8 (2=correct, 1=no opinion, 0=incorrect). The mean=4.5(56.2%), standard deviation=1.58, median=4(50%) and mode=4(50%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 21.

Table 21.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 7.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	4.81	1.45	-1.462	106	.147
≥45	50	4.38	1.60			
Gender Male	30	5.00	1.66	1.592	113	.114
Female	85	4.47	1.53			
Experience <4yrs	50	4.98	1.31	-2.505	108	.014
≥4yrs	60	4.23	1.73			
Job status Fulltime	83	4.68	1.59	-.854	113	.395
Other	32	4.40	1.52			
Shift Day	71	4.84	1.60	-2.197	112	.030
Other	43	4.18	1.46			

Workers with less than four years experience scored statistically significantly higher on this subscale than the more experienced workers. In addition, dayshift workers scored statistically significantly higher on this subscale compared to the workers on

other shifts. No statistically significant differences in scores were found between other groups.

ANOVA

Differences between groups in the categories age, level of education, level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale ($p's > .05$).

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

For these items all group comparisons were not significant ($p's > .05$): Qu.25. I believe that anything a client tells me in private must remain confidential, Qu.26. I cannot be held responsible for client behaviour when they are away from my workplace, Qu.27. I feel confident I can deal with any client problems.

Core Competency 8 Comply with legal responsibilities.

As there were 5 items in this subscale, the maximum score a participant could achieve was 10 (2=correct, 1=no opinion, 0=incorrect). The mean=7.15(71.5%), standard deviation=1.97, median=7.5(75%) and mode=8(80%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 22.

Table 22.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 8.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	7.05	2.02	.769	106	.444
	≥45	50	7.34	1.83			
Gender	Male	30	7.43	2.28	.756	113	.451
	Female	85	7.12	1.73			
Experience	<4yrs	50	7.38	1.88	-.933	108	.353
	≥4yrs	60	7.05	1.81			
Job status	Fulltime	83	7.34	1.90	-1.29	113	.200
	Other	32	6.84	1.83			
Shift	Day	71	7.43	1.74	-1.714	112	.089
	Other	43	6.81	2.08			

No statistically significant differences in scores were found between groups.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale ($p's > .05$).

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

For these items all group comparisons were not significant: Qu.30. I am willing to be assigned legal responsibility for a client's treatment, Qu.31. I believe that in certain cases it may be necessary to withdraw client privileges until they participate in treatment.

Core Competency 9 Promote the health and wellness of consumers, families and communities.

As there were 4 items in this subscale, the maximum score a participant could achieve was 8 (2=correct, 1=no opinion, 0=incorrect). The mean=6.45(80.6%), standard deviation=1.60, median=7(87.5%) and mode=8(100%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 23.

Table 23.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 9.

Variable	N	Mean	S.D.	t	df	Sig. (2-tailed)
Age <45	58	6.36	1.57	.594	106	.554
≥45	50	6.54	1.53			
Gender Male	30	6.23	1.47	-1.098	113	.275
Female	85	6.58	1.53			
Experience <4yrs	50	6.50	1.35	.000	108	1.00
≥4yrs	60	6.50	1.63			
Job status Fulltime	83	6.63	1.38	-1.631	113	.106
Other	32	6.12	1.80			
Shift Day	71	6.47	1.43	.349	112	.727
Other	43	6.58	1.65			

No statistically significant differences in scores were found between groups.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. No significant differences in these groups were found regarding scores on this subscale ($p's > .05$).

Individual item analysis

Individual items that had less than 65% correct were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item. All item frequency scores are located in Appendix I.

Question (39) 'I believe that consultation with local drug and alcohol agencies is an important part of my job' had a helpful response rate of 58.2%. Fulltime workers, (n=83, 75% correct, S.D.=0.74) displayed a significantly more helpful attitude than part-time/on-call casual workers, (n=28, 55% correct, S.D.=0.88), $t(109)=2.36$, $p=.02$. In addition those workers who had trained at university (n=19, 87% correct, S.D.=0.56) showed a significantly more helpful attitude than workers who trained in-house, (n=34, 57% correct, S.D.=0.86), $F(2,110)=3.69$, $p=.028$.

Other comparisons involving this item were not significant ($p's > .05$).

Core Competency 10 Promote individual professional growth.

As there were 6 items in this subscale, the maximum score a participant could achieve was 12 (2=correct, 1=no opinion, 0=incorrect). The mean=10.51(87.5%), standard deviation=1.71, median=11(91.6%) and mode=12(100%).

Group Comparisons

t-test

The difference in mean scores between groups (age, gender, years of experience, whether a position was fulltime or not, dayshift or other) was analysed using the *t* test. The results of this analysis are shown in Table 24.

Table 24.

Comparison of mean scores using the *t*-test between groups in the variables age, gender, years of experience, whether a position was fulltime or not, and shift worked on core competency attitude subscale 10.

Variable		N	Mean	S.D.	t	df	Sig. (2-tailed)
Age	<45	58	10.65	1.33	.018	106	.986
	≥45	50	10.66	1.49			
Gender	Male	30	10.56	1.43	-.330	113	.742
	Female	85	10.67	1.49			
Experience	<4yrs	50	10.74	1.38	-.662	108	.509
	≥4yrs	60	10.55	1.58			
Job status	Fulltime	83	10.71	1.42	-.787	113	.433
	Other	32	10.46	1.60			
Shift	Day	71	10.88	1.32	-2.42	112	.017
	Other	43	10.20	1.62			

Dayshift workers scored significantly higher on this subscale than evening, night and variable shift workers. No statistically significant differences in scores were found between other groups.

ANOVA

Differences between groups in the categories level of education and level of training were examined using oneway ANOVA. No significant difference was found between groups in the category-level of training ($p > .05$). Workers with a university education ($n=42$, mean=10.9, S.D.=1.24) and workers with a trade certificate or diploma ($n=35$, mean=10.9, S.D.=1.08) scored significantly higher on this subscale than workers who had a high school education or less, ($n=36$, mean=10, S.D.=1.87), $F(2, 112)=4.77$, $p=.01$.

Individual item analysis

No individual items had less than 65% correct on this subscale.

Summary of correlational analysis of attitudes subscales

Attitudes

As there were 10 subscales, 45 inter-correlational relationships had to be examined. The influence that having a more helpful attitude in one area is associated with an increased helpful attitude in another area is demonstrated by the number of instances where higher scores on one subscale were significantly associated with higher scores on another subscale. This occurred in 33 of these relationships with 28 of these associations significant at the 0.01 level.

Attitudes and Work Environment

As there were 20 attitude and work environment subscales, 90 correlational relationships had to be examined. Only ten of these showed a significant association. The most prominent of these was the negative associations between having a helpful attitude towards complying with legislation and support ($r = -.268, p < .05$), anger and aggression ($r = -.252, p < .05$), order and organization ($r = -.279, p < .05$ level) and program clarity ($r = -.309, p < .01$).

Demographic variables

Increased experience was associated with a less helpful attitude towards assessment ($r = -.203, p < .05$ level).

An increased level of education was associated with a more helpful attitude towards demonstrating culturally appropriate practice ($r = .194, p < .05$), promotion of individual growth ($r = .253, p < .01$), demonstrating knowledge ($r = .405, p < .01$) and communicating effectively ($r = .382, p < .01$).

Increasing age was associated with a less helpful attitude towards demonstrating culturally appropriate practice ($r = -.355, p < .01$), demonstration of knowledge ($r = -.302, p < .01$), and effective communication ($r = -.307, p < .01$).

The complete results of the correlational analysis are recorded in Appendix J.

Work Environment Assessment

The third instrument utilized was the Ward Atmosphere Scale (Moos, 1996), in order to provide characterisation of the current therapeutic environment. It was used here to identify features of the work environment that would be facilitative towards client support and those that may be detrimental to support. Table 25 shows the descriptive statistic scores and standard mean scores for the ten Ward Atmosphere subscales.

Table 25

Ward Atmosphere Subscale Descriptive Statistics

	<i>N</i>	Mean	Median	Mode	S.D.	Standard score
Supp	71	3.6	4	4	1.4	31
Auto	65	4.7	5	4	1.4	43
Invo	74	4.3	4.5	5	1.7	40
Spon	72	3.8	4	4	1.5	40
Prac	71	4.1	4	5	1.1	34
Pers	73	3.6	3	3	1.5	39
Ange	68	3.9	4	3	2.1	37
Orde	75	5.1	5	6	2.1	45
Prog	72	4.9	5	5	1.4	41
Staf	65	1.4	1	1	1.4	28

Note

Supp=support Auto=autonomy Invo=involvement Spon=spontaneity

Prac=practical orientation Pers=personal problems orientation

Ange=anger and aggression Orde=order and organization

Prog=programme clarity Staf=staff control

Reliability of ward subscale dimensions

The alpha reliabilities of the subscales were: Relationship dimension, $\alpha=0.7693$, Personal Growth dimension, $\alpha=0.5859$, System Maintenance Dimension, $\alpha=0.5649$.

In order to present staff perceptions of their work environment in context, the data from this study was compared with those taken from normative samples from the U.S.A. and U.K. (from Moos, 1997). This comparison is represented in Figure 4.

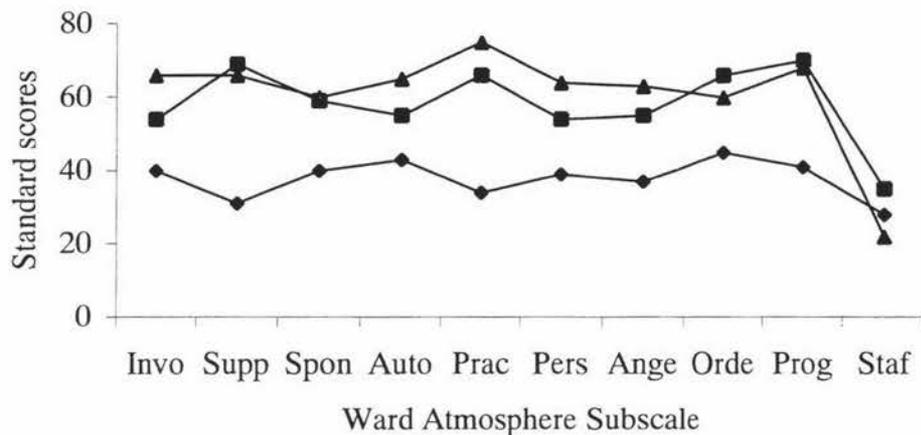


Figure 4

WAS scores from U.S.A., U.K. and N.Z. samples.

(-■- U.S.A., -▲- U.K., -◆- N.Z.)

Both the American and British normative data were collated from staff in hospitals, which are strictly not equivalent workplace environments to New Zealand community residences. However, this normative data is a useful standard to which the data from this study can be compared.

The most obvious feature demonstrated by Figure 4 is the overall lower ratings of the New Zealand sample. The only subscale where there was near agreement was 'staff control' which assesses the extent staff use measures to maintain control.

However, the difference in workplace settings should not account for the low scoring by participants in this study regarding all aspects of their work environment. The WAS subscale scores from this study are generally very low with not one reaching the mean bar of fifty.

Summary of correlational analysis of work environment subscales

Work environment

As there were ten subscales, there were 45 inter-correlational relationships to be examined. The influence of aspects of the work environment on one another is apparent where higher scores on one subscale were significantly associated with higher scores on another subscale. This occurred in 30 of these relationships with 23 of these associations were significant at the 0.01 level.

Demographic variables

No significant associations were found between aspects of the work environment and participant demographic characteristics.

The complete results of the correlational analysis are recorded in Appendix J.

Discussion

This study's objective was the establishment of the current competency status of the New Zealand residential mental health support worker by assessment of the domains of skills and attitudes according to the recommended core competencies for all mental health workers (NMHWDC, 1999) and the domain of work environment through the perceived atmosphere of this setting.

Summary of major findings

The aggregated results of this study appeared to suggest that the bulk of this sample of the workforce have the requisite skills and attitudes for minimally competent work practice. However, closer inspection appears to have uncovered some serious inadequacies, what in some instances are critical areas of client support. In addition, the evaluation of the work environment displayed an ethos of work practice that indicated low morale amongst workers and one at odds with the recovery approach.

Overall skills and attitudes scoring on the measures (with average scores of over 70%) gave the impression that this sample in general was possessive of competence in their work to a reasonably high standard. The generally high level of appropriate skills and attitudes demonstrated show that these participants appear to have mastered a significant portion of the performance criteria deemed necessary for competent work practice. However, the use of the overall measures of skills and attitudes alone to assess participant competency status allows for conclusions that may in fact be misleading.

When assessment of competency status regarding skills and attitudes was carried out on individual core competencies, the shortcomings identified in this sample somewhat undermined the encouraging conclusions drawn from the initial summary evaluation. Regarding skills, workers displayed specific deficiencies in the key competencies of knowledge, assessment and intervention. Many of these deficiencies were identical to those identified five years ago in an analysis for the Central Regional Health

Authority (Clark & Hughes, 1996). These include knowledge, culturally appropriate practice and assessment. Previous research has found that staff have reported that areas of work practice such as mental health assessment, for which they believe that they are inadequately trained, to be a major source of frustration and alienation in this career (Cherniss & Egnatios, 1978).

Assessment of attitudes related to individual core competencies saw similar shortcomings reported in the critical areas of knowledge, culturally appropriate practice, assessment and safe/ethical practice. It is generally accepted that the wellbeing of mentally disabled individuals is influenced by the attitudes of the mental health workforce (Cohen & Struening, 1962). These findings support to some extent concerns raised by consumers about some support workers' unhelpful attitudes regarding the impact that a mental disability has on the individual (Wilson, 1997).

The standout feature of the correlational analyses is the significantly positive associations between nearly 90% of these competencies in the domain of skills. An increased skill in one competence is generally associated with increased skill in another competence. The conclusion one can draw from this is that the acquisitions of skill competencies may not operate in isolation from each other. Similar strong associations were found in the intercorrelations in the domains of attitudes and work environment.

When the attitude scores were correlated with the skills scores there were only slightly over a third of the associations that were significantly associated. It is notable that with the exception of the competence 'demonstrate culturally appropriate practice', the bulk of relationships where there was no significant associations were those that were involved with work practice. The model of competence proposed in this study (Figure 1) proposes that it is the interaction between the domains of skills, attitudes and work environment that results in competence. Clearly this is not occurring here, as there does not appear to be any substantive relationships between many skills and attitudes.

This lack of interaction is even more manifest in the absence of significant relationships between skills and facets of the work environment. Just over 6% of

associations were significantly correlated in a manner that promotes enhanced support for the client. The lack of significant associations between attitudes and aspects of the work environment was marked by the presence of only a handful that were significantly correlated in a manner that reflected superior support for the client.

Given the apparent shortcomings in some key areas of work practice that workers appeared to display, the negative appraisal of the work environment was not surprising or unexpected. Dissatisfaction with the work environment appears to be not uncommon within the mental health arena, especially with those who work with individuals with a severe mental disability. Oberlander (1990) reported that staff working with these particular individuals had both higher levels of stress and lower levels of job satisfaction than workers who work with other groups (e.g. a broad range of clients).

Each area assessed is now discussed followed by conclusions, limitations of the study, and future directions.

Skills Assessment

Aggregated skills scores

The aggregation of scores of the skill's subscales shows that only two (1.7%) of the participants got less than half of the responses correct in the skills domain. Nine (7.4%) participants scored between 50 and 59 percent, twelve (9.9%) of the participants scored between 60 and 70 percent with the remainder 98(80.9%) scored more than 70 per cent correct on the skill's instrument. The average score was 75.3%. The reliability alpha coefficient (0.90) was acceptable according to standard psychometric criteria.

Fulltime worker's scores averaged 77.3% on this instrument and were significantly higher than part-time or on-call casual workers. Given that fulltime workers spend more time with clients the outcome of this analysis is neither unexpected nor undesirable. It must be stated that the part-time and on-call casual workers still averaged a respectable 73% on the skills instrument.

The benefits of superior education and training were apparent when scores on this instrument were compared. Those workers with a university education or who had a trade or professional certificate/diploma averaged scores over 75%, whilst workers who had a high school education or less averaged 70%.

Regarding specific training for this type of work, those workers with a university degree pertinent to this work or who had acquired a professional certificate/diploma in a mental health-related field demonstrated the benefits with average scores of 81% and 78% respectively. This should provide some comfort to those who advocate that all mental health support workers should have attained professional certification. The merit of in-house training should not be undervalued as workers trained in this manner still achieved an average score of 70% on this skills instrument but the virtues of further education were clearly demonstrable.

Individual core competency scores

The aggregate assessment of the competency status of the residential support worker showed that in general these workers displayed a high level of competence in the domain of skills. Although participant scores were quite high in the overall skills measure, the NMHWDCC (1999) expects workers to display the full range of core competencies according to their performance criteria. As this clearly was not shown in the overall assessment given that no worker scored 100%, the objective here was to evaluate the participants' performance on each of the NMHWDCC (1999) recommended core competencies. The intent of this more detailed analysis was to discover which specific competencies posed particular problems for the participants and to determine underlying reasons for these difficulties.

The aggregated skill scores in the first section of this discussion may be misleading to the extent that they mask several major areas of skill deficiency not apparent from these overall results. The results from this more detailed analysis of participant skills has identified several areas of work practice where there are concerns about the abilities of the participants to provide a competent service for their clients. On a more positive note, there was successful demonstration of a majority of the core

competencies. However, taken together, the deficiencies highlighted in the next section may in some cases undermine the average level of competencies that were demonstrated. For example, an inability to carry out a basic mental health assessment may impede the demonstration of other competencies.

Core Competency 1

The first core competency was ‘Demonstrate knowledge and understanding of mental health, mental illness and mental health services’. The mean score of 67% on this subscale was below the overall skills mean of 75%. Males scored higher than females here although there is little one can infer from this.

Individual items that had over 30% incorrect were subject to the same between groups analysis as the subscales in an effort to determine the high failure rate on a particular item.

Single item analysis does not provide definitive evidence as to why participants had difficulties with particular items. In some cases, a superior education appeared to have helped participant scores but across all items with a high failure rate, no singular participant characteristic was found that could explain the poor scoring.

While some items assessed a more global knowledge of mental health, others were quite specific and may have implications for work practice. The items ‘Clients with bipolar disorder often hear voices’ (incorrect responses=30.3%) and ‘Recurrent thoughts of death/suicide are a common feature of schizophrenia’ (incorrect responses=48.4%) are of particular concern. Demographic data (Appendix G) shows that the main client disabilities encountered by these workers are schizophrenia and bipolar disorder. This lack of knowledge about salient features of both these disorders should be of concern to employers, workers and clients.

Core Competency 2

The second core competency was 'Communicate effectively'. The mean score of 77.8% on this subscale was above the overall skills mean of 75%. The benefit of superior education was apparent as more highly educated participants scored significantly higher than those workers with a high school education or less. In addition the benefit of superior training was demonstrated by the significantly higher scores achieved by university trained workers compared to those workers trained in-house.

There were only two items that had over a 30% failure rate. In the case of the item 'I have been trained to use reflective practice techniques', there may have been some confusion over what these techniques entail. However the more surprising result given the high levels of skill generally displayed in responses to this subscale was in responses to the item 'Dislike of a client impedes effective care'. Over 70% of participants scored this as 'true' which is at odds with most of their responses to other items on this subscale. This incorrect response was apparent across all sub-groups and suggests a serious deficit in work practice.

Core Competency 3

The third core competency was 'Demonstrate culturally appropriate practice'. The mean score of 85% on this subscale was above the overall skills mean of 75%. There were no significant differences between groups with all participants in general displaying a high level of skill in this particular competency.

The scores on this subscale were very impressive as demonstrated by the overall mean. They suggest that culturally appropriate practice is a competence that is generally inculcated in this workforce. Despite these generally impressive results, two items on this subscale had a relatively high failure rate.

The item 'I am familiar with the various Maori models of wellness, e.g. Te Whare Tapa Wha' had a failure rate of nearly 40%. It could be argued that knowledge of these models is not strictly necessary for the demonstration of culturally appropriate practice. However, awareness of these models does provide the worker with greater insight when working with Maori clients. Whilst knowledge of these specific models

was not specifically stated in the performance criteria, culturally appropriate practice does demand a working knowledge of various cultures' belief systems.

The responses to Question (36) 'I am uncomfortable with the beliefs and values of some clients' are akin to the responses to Question (15) 'I believe dislike of a client impedes effective care' in the second skill competency subscale. The high incorrect response rate of 37.7% is at odds with the skills demonstrated in responses to other items on this subscale. Most surprising was the large percentage of workers (47%) with a professional certificate or diploma who answered this item incorrectly. The high failure rate for this particular item does raise some concerns regarding competent work practice by those workers who are uncomfortable with certain clients' values and beliefs. Alternatively, it certainly does not rule out competent delivery of service though, if it leads to dislike of clients, it may reflect on the quality of support provided.

Core Competency 4

The fourth core competency was 'Assess consumer health needs'. The mean score of 72% on this subscale was below the overall skills mean of 75%. Both fulltime workers and those workers with superior training scored significantly higher on this subscale than part-time/on-call casual workers and those whose training was in-house.

The scoring on this subscale suggests that there are some performance criteria related to this competency where workers need additional training. The high failure rate of 37.7% on the item 'I have been trained to carry out a basic mental health assessment of clients' is a prime example. Worker's inability to carry out this critical function can only have a detrimental effect on their capacity to provide acceptable care for their clients. Lack of assessment skills was one skill deficiency noted by Clark and Hughes (1996) in their skills analysis for the Central RHA.

In the case of the item 'I assess the needs of family members who are affected by my client's illness' where there was a failure rate of 57.4%, it may be that workers have little contact with client's families. This high failure rate was spread across all the participants regardless of the influence of training or other worker attributes.

The high failure rate of 57.4% on Question (39) 'Suicide in mentally ill clients is associated with a history of self-harm' may also have implications for practice given that this type of behaviour is not that uncommon amongst clients with a serious mental disability (Kaplan & Sadock, 1998).

The final case of Question (44) 'I have been trained to recognize the presence of alcohol and drug problems' where there was a failure rate of 31.1% also raises a major concern about work practice. Worker's inability to recognize substance abuse problems raises concern about their capacity to provide acceptable care for their clients given the association of substance abuse with schizophrenia and other disorders (Kaplan & Sadock, 1998).

It should be noted that the influence of additional training such as the achievement of a certificate or diploma in mental health raised scores on both mental health assessment and recognition of alcohol and drug problems to 74% and 81%, respectively. The benefits of additional training in mental health support work obviously have an influence on the worker's competence at assessing client needs in this area.

Core Competency 5

The fifth core competency was 'Provide appropriate intervention for consumers'. The mean score of 65.8% on this subscale was below the overall skills mean of 75%. Day shift workers and those with a trade or professional certificate scored significantly higher on this subscale than workers employed on evening/night shifts and those with a high school education or less, respectively.

The aggregated results for this subscale raises concerns about a large percentage of these participants' ability to 'provide appropriate intervention for consumers'. Nearly 90% of these participants agreed that the recovery approach was standard practice in their workplace. However, on the two items assessing knowledge about the concept of recovery- 'The value of the recovery approach has been shown in the institutional environment' and 'recovery means a client's return to full health' there were failure rates of 65.6% and 36.9% respectively. The lack of basic knowledge about what the

recovery approach entails suggests that many workers may have difficulty implementing this approach.

The lack of training reported by participants (49%) with respect to clients who have a dual diagnosis is also not encouraging news. As mentioned previously, many clients with a chronic mental disability have accompanying substance abuse problems (Kaplan & Sadock, 1998). This result suggests a serious shortfall in many workers' capacity to provide suitable interventions for these clients.

There was further concern regarding participants' responses regarding training in administering calming and restraint techniques when they encounter challenging and threatening behaviour. Nearly 46% of participants report no training in this area. This raises concerns about their own safety and the safety of clients.

Lastly the issue of medication also causes some disquiet when scores on single items were examined. The numbers of participants who reported that they gave clients medication was quite high-68%. If this is standard practice, one would expect some knowledge about the dangers or side effects to medication. This lack of knowledge (85.2% incorrect) was clearly demonstrated from the responses to the item 'Tardive dyskinesia can result from taking a wide range of medications'. This condition occurs only as a result of taking antipsychotic medications that are dopamine receptor antagonists such as haloperidol (Kaplan & Sadock, 1998). The medication issue is not referred to per se in the performance criteria but the inclusion of such an item was necessary given the widespread use of drugs as an intervention tool (Barreira, 1996).

Core Competency 6

The sixth core competency was 'Keep records in a clear, concise and accurate format'. The mean score of 93% on this subscale was well above the overall skills mean of 75%.

There was almost universal consensus regarding scores on this subscale with a very high level of reported competence demonstrated regarding record keeping. Whether the self-reported keeping of records reflects the actual record keeping practices could not be ascertained in this study.

Core Competency 7

The seventh core competency was 'Practice safely and ethically'. The mean score of 90.5% on this subscale was well above the overall skills mean of 75%.

Scoring on this subscale was generally very high with the participants displaying a high level of reported competence in safe and ethical work practice.

Core Competency 8

The eighth core competency was 'Comply with legal responsibilities'. The mean score of 44% on this subscale was well below the overall skills mean of 75%.

Fulltime workers scored significantly higher on this subscale than part-time/on-call casual workers.

The low scoring across this subscale raises questions about what level of competence is required by these workers with regard to legal issues. However, given that nearly three-quarters of participants reported that they had read the 1992 Mental Health Act, the poor scoring was surprising.

The item 'A 'Special Patient' can be forced to have electroconvulsive therapy (ECT)' with its failure rate of 91% was an item that does require knowledge of the Mental Health Act. The small number of correct responses may be due to the fact that ECT is not used in the community setting.

The item 'The sanctity of the client/expert bond of confidentiality may be broadened to include family members in the case of Maori and other clients' with its failure rate of 47.5% may reflect a concern noted in attitude responses that many workers are reluctant to break client confidentiality.

The item 'Families have the right to commit clients to psychiatric institutions' with its failure rate of 63.1% could be deemed ambiguous as the process may include family input. However, as noted above, three-quarters of participants did report reading The Mental Health Act which conflicts with their responses to this item.

The other item where there was low scoring was 'A Duly Authorised Officer is either a medical doctor (e.g. a psychiatrist) or a clinical psychologist', which had a failure rate of 51.6%. This was a poor response to a basic question regarding the role a Duly Authorised Officer plays in client care. Given that one would expect these workers to be at least in contact with or supervised by nursing staff, this lack of knowledge is of concern.

Core Competency 9

The ninth core competency was 'Promote the health and wellness of consumers, families, and communities'. The mean score of 87.7% on this subscale was well above the overall skills mean of 75%. Fulltime workers scored significantly higher on this subscale than part-time/on-call casual workers. The effect of training was apparent with both participants with a university degree and those with a professional certificate or diploma scoring higher on this subscale than participants who had trained in-house.

Workers could be described as generally displaying the appropriate level of competence in the promotion of the health and wellness of consumers, their families and the community at large. There were two items on this scale where there was a high failure rate.

The item 'I implement individual lifestyle planning for my clients in accordance with the Treaty of Waitangi principles' had a failure rate of 39.3% with those with less training scoring lower on this item. This discrepancy in scoring on this item could reflect the amount of influence and confidence the more highly trained staff have in the development of care plans compared to workers with less training.

Question (76) 'I liaise with the staff at local drug and alcohol agencies' had a failure rate of 36.9% with poorer scores being recorded by part-time/on-call casual staff and those with less training. The discrepancy in scoring regarding job status could be related to the worker's shift. Fulltime staff usually work during the daytime when drug and alcohol agencies are open, whereas the part-time/on-call casual workers more often have shifts in the evenings or nights. The difference in scoring regarding level of training perhaps reflects the greater ability and knowledge that the more

highly trained worker brings to mental health support work about the value of using outside agencies for increased client support (Coursey et al, 2000).

Core Competency 10

The tenth core competency was 'Promote individual professional growth'. The mean score of 87.7% is well above the overall skills mean of 75%. Fulltime staff and staff whose training included professional qualifications scored significantly higher on this subscale than part-time/on-call casual staff and in-house trained staff, respectively.

Participants generally demonstrated the desirable high level of skills necessary for demonstration of the promotion of individual professional growth. These results from this competency are encouraging as they show workers generally making attempts to enhance their abilities at this type of work. In addition, the means by which they are accomplishing this goal - through supervision, peer review and education is highly desirable.

Summary of skills core competencies

Core competency (1)

The results here were generally disappointing. Scores on some items defied common sense as one would expect individuals not employed in this field to be able to correctly answer these items (e.g. 'Poverty is associated with poor mental health' with nearly half of participants responding incorrectly to this item). There appears to be a need of greater knowledge of the important features of the specific mental disabilities that clients have in order to provide the necessary support.

Core competency (2)

The results suggest that participants report themselves to be generally skilled at effective communication. The one aberrant feature here is the strong belief that dislike of a client impedes effective support. This is a belief that needs to be addressed.

Core competency (3)

The results suggest that in general workers were competent in demonstrating culturally appropriate practice. The only area of major concern was the large number

of participants reporting feelings of being uncomfortable with client value and beliefs and the possible impact of this belief on support.

Core competency (4)

The results suggest that a substantial number of workers do not possess the requisite abilities to carry out the assessment of consumer health needs. This appears to be manifested through a lack of training given those workers with professional qualifications were generally more skilled in achieving competent work practice in this area.

Core competency (5)

The results suggest that there are major shortcomings in both knowledge and skills that are impeding competent provision of appropriate intervention for consumers. The lack of knowledge about what the recovery approach entails is a concern. Lack of training for clients with a dual diagnosis and in the application of calming techniques are areas that need to be addressed. Lastly, workers appear to need education regarding the effects of different medications.

Core competency (6)

Workers reported that they are generally very competent at keeping records in a clear, concise and accurate format.

Core competency (7)

Workers reported themselves to be generally competent at practising in a safe and ethical manner.

Core competency (8)

Workers appear to be lacking knowledge about legal issues. The question of what knowledge is required for competent support worker practice is examined later in the Discussion.

Core competency (9)

Workers generally demonstrated an acceptable level of competence in promoting the health and wellness of consumers, families and communities. The effect of training

was apparent here with workers with professional qualifications displaying a greater range of ability.

Core competency (10)

Workers reported themselves to be competent in the promotion of individual growth. The effect of training was apparent here with workers with professional qualifications displaying more competence.

Attitudes assessment

Aggregated attitude scores

The aggregation of scores of the attitude's subscales shows that the 121 participants included for statistical analysis all scored over 50% on the attitude instrument, the lowest score being 57%. A total of nine (7.4%) participants scored between 57 and 59%, 24 (19.9%) scored between 60 and 69% while the remainder 88 (72.7%) scored over 70%. The average score was 75%. As with the aggregated skills scores these are seemingly impressive results. The reliability alpha coefficient (0.86) was acceptable according to standard psychometric criteria.

There were several statistically significant differences regarding scores on this scale. Both younger workers (i.e. less than 45 years old) (average score, 77%) and less experienced workers (i.e. less than four years experience) (average score, 76%) appear to hold more appropriate attitudes according to scores on this subscale. One can only speculate as to reasons for these differences. The younger workers may be more enthusiastic and optimistic about their work than their older counterparts given that the majority of the older workers have also been carrying out this very challenging work for a longer period of time. As mentioned in the Introduction, mental health has not been a priority when it comes to Government funding. This lack of emphasis could perhaps engender a cynicism and malaise that may be manifested by the lower scores by older workers on this attitude scale. That said, it must be stated that the average scores on this scale for the older worker and the more experienced worker were not dramatically lower at 72%.

In addition to these differences, fulltime workers (average score, 76%) also displayed attitudes more in line with the competencies than their part-time and on-call casual counterparts. This could reflect a greater emphasis that fulltime workers place on their work compared to the part-time and on-call casual workers. However, the part-time and on-call workers averaged 71% on this scale which suggests that they generally hold competent attitudes regarding their work practice.

The effect of superior education and training were also apparent when scores between groups were compared. Both workers who had a university education (average score=79%) or a trade or a professional certificate or diploma (average score=75%) scored significantly higher on this scale than workers who had a high school education or less (average score=67%). The effect of a university education pertinent to this type of work was even more pronounced with scores for these participants (average score=81%) being significantly higher than both participants with a professional certificate or diploma in this area (average score=75%) and those who had been trained in-house (average score=72%).

According to these results, one can state that the residential mental health support worker does appear to display, in general, appropriate attitudes necessary for competent work practice. The older and more experienced workers appear to display slightly less helpful attitudes towards their work than their younger and less experienced counterparts, although the former still show a reasonable level of competence in this domain. It is to the worker's advantage that they further their education and training as the concomitant benefits are demonstrated through more appropriate attitudes regarding their work.

Again in this area, the aggregated attitude scores may be misleading to the extent that they mask several major areas where helpful attitudes are not being demonstrated. The results from more detailed analysis of participant attitudes identified several areas of work practice where there are concerns about the abilities of the participants to provide a competent service for their clients. On a more positive note, as discussed earlier in this section, there was successful demonstration of a majority of the core competencies by a majority of participants.

Individual core competency scores

The apparent high level of competence displayed in the aggregate domain was placed under further scrutiny given that no worker displayed the full range of competencies (i.e., a score of 100%). The intent of this more detailed analysis is to discover which specific competencies posed particular problems for the participants and to determine underlying reasons for these difficulties.

Core Competency 1

The first core competency was 'Demonstrate knowledge and understanding of mental health, mental illness and mental health services'. The mean score of 70.6% on this subscale was below the overall attitudes mean of 75%. Younger workers (<45 years old) scored significantly higher on this subscale than older workers (≥ 45 years old). Fulltime workers scored significantly higher on this subscale than part-time/on-call casual workers. University educated workers scored significantly higher on this subscale than workers with a high school education or less. Workers whose training included a university degree scored significantly higher on this subscale than workers with a professional certificate or diploma or those who had trained in-house.

Workers's attitudes regarding the core competency 'Demonstrate knowledge of mental health, mental illness and mental health services' mirror the shortfalls identified in the skills subscale analysis especially regarding work practices. Items with a high percentage of unhelpful responses reflect that many workers are not demonstrating this core competency.

The belief by over 30% of workers that medication was the most effective way to treat clients suggests that these participants' work practice is not one based on recommended rehabilitation and recovery principles (Anthony, 1993). More disturbingly, this negative view was one that could not be ascribed to any particular group. This raises questions about the quality of training and how these workers intervene with clients.

The belief held by many workers (32%) that clients 'use their illness as an excuse for their behaviour' raises the same concerns. This attitude reflects a fundamental lack of knowledge about mental illness and must be regarded as unhelpful to one's work practice.

Further shortfalls in knowledge were reflected in the large numbers of participants (37%) who minimise the influence of the impact of cultural factors in mental illness. Maori individuals are over-represented across many diagnostic categories compared to Pakeha individuals (Dyall, 1997) and to minimize the effect of culture suggests a serious shortcoming in worker knowledge.

The final area of concern regarding responses to items on this subscale was that only one quarter of participants believed that personality was implicated in the etiology of mental disorders (Kaplan & Sadock, 1996). This response displayed across all categories of workers raises a concern about training and the ability of members of this workforce.

Core Competency 2

The second core competency was 'Communicate effectively. The mean score of 79.6% on this subscale was above the overall attitudes mean of 75%. Younger workers (<45 years old) scored significantly higher on this subscale than older workers (\geq 45 years old). Workers who had a trade certificate or were university educated scored significantly higher in this subscale compared to those who had a high school education or less. Workers with a university degree scored significantly higher on this subscale than workers with in-house training. Responses to items on this subscale showed that workers generally demonstrated the competency consistent attitude towards communicating effectively. There were however some responses to particular items that require further comment.

The poor correct response rate (19.7%) to the item 'I talk to clients in the same manner that I talk to anyone (e.g. friends)' suggests that some workers are showing a lack of awareness about the needs of individuals with a mental disability. The worker role is to facilitate recovery and a casual manner of interaction may at times be

unhelpful. That said, responses to this item must be qualified by the idea that the worker may be interacting in this fashion in order to display a humanity and normalization experience for clients. More research here would have been helpful.

Less than half of the participants (48.4%) agreed that 'Clients provide the best solutions to their problems' which suggests that in many cases this option might not be considered. The inference one could draw from this is that the staff are making the decisions for the client with little being done to support client self-determination. Recovery involves full participation of the client in the decision-making process (Mental Health Commission, 1997), and the attitude expressed by a majority of participants suggests that this may not be occurring.

A majority of workers expressed the attitude that it was helpful to 'demonstrate my understanding of how my clients feel directly to those clients'. However, over a third (37%) did not display this helpful attitude of empathy towards the client, an attitude that is crucial to one's ability to facilitate client recovery (Mental Health Commission, 1997).

Core Competency 3

The third core competency was 'Demonstrate culturally appropriate practice'. The mean score of 72.3% on this subscale was below the overall attitudes mean of 75%. Younger workers (<45 years old) scored significantly higher on this subscale than older workers (\geq 45 years old). Fulltime workers scored significantly higher on this subscale than part-time/on-call casual workers. Staff who had a university education scored significantly higher on this subscale than those who had a high school education or less.

The results of scoring on this subscale suggest there is some confusion amongst workers regarding culturally appropriate practice.

The large percentage (40%) of workers who agreed or had no opinion regarding the sentiment that 'The Treaty of Waitangi has little relevance in the day-to-day care of Maori clients' are expressing a view at odds with standards of work practice in New

Zealand. In addition, the principle of partnership underlines the joint role the worker and client play in the facilitation of recovery (Mental Health Commission, 1997).

The view expressed by slightly over a third of participants (36.1%) that 'too much emphasis on culturally appropriate care can hinder rehabilitation of clients' highlights this confusion that was apparent from participant responses regarding working with clients of a different culture.

The view expressed by nearly a third of participants (31.1%) that one should 'always liaise with a Maori client's family in order to provide appropriate care' is perhaps a demonstration of confusion regarding culturally appropriate practice. These workers may not realise that it is ultimately the choice of the client as to whether they wish their family to be involved, (K.Ronan, personal communication, May 30, 2000).

Core Competency 4

The fourth core competency was 'Assess consumer health needs'. The mean score of 69.3% on this subscale was below the overall attitudes mean of 75%. No significant differences between these groups were found regarding scores on this subscale.

Responses to items on this subscale suggest that are several important areas where workers have difficulty in understanding both how to assess clients and what exactly comprises the role of a support worker.

Confusion over the role is demonstrated by the attitude expressed by nearly 45% of participants that mental health assessment should be left to the professionals. The recommended performance criterion is that support workers should be able to carry out such an assessment (NMHWDC, 1999). Whether the negative responses reflect a lack of training or confidence on the part of the worker is a matter of conjecture as this opinion was expressed by all groups of workers.

The lack of knowledge regarding assessment was further demonstrated by the response to the item 'I believe that assessment of client needs does not have to be a formal procedure'. Only one quarter disagreed with this idea. Client assessment is a

formal and standardized procedure underpinned by theory and training. Given this attitude, one would question if appropriate assessment is occurring in practice.

More shortcomings around the issue of assessment are apparent with the almost one third of participants expressing the view that 'clients use their illness as an excuse for weird behaviour when their behaviour is not typical of their diagnosed disorder'.

There was further concern with responses to the item 'I believe that observing my clients day-to-day is enough to accurately assess their needs' with less than two-thirds disagreeing with this view. Assessment is a formalised procedure that demands interaction and careful evaluations requiring much more than simple observation (NMHWDCC, 1999).

Core Competency 5

The fifth core competency was 'Provide appropriate intervention for consumers'. The mean score of 73.7% on this subscale was below the overall attitudes mean of 75%. Younger workers (<45 years old) scored significantly higher on this subscale than older workers (≥ 45 years old). Workers who had a university degree scored significantly higher on this subscale than those who had trained in-house. Responses to several items suggest that there are areas of worker practice that require attention.

The overallly optimistic attitude expressed by half of the respondents that some clients should not be in a hospital setting is an opinion not based on realism. Unfortunately, some individuals given the severity of disorder may not be able at various times and for brief periods to reside successfully in the community (K.Ronan, personal communication, May 30, 2000).

Only half of the participants expressed confidence in their ability to work with clients who had a dual diagnosis. This ability is one of the standard performance criterion required to demonstrate the competency to provide appropriate intervention for consumers (NMHWDCC, 1999).

Nearly one third of participants (30.3%) agreed with the attitude 'I can understand staff losing their temper in front of clients'. This is a concern. The value of superior training was very evident regarding responses to this item with university trained workers (89% correct) displaying a more helpful attitude than in-house trained workers (54% correct). It is clear that these workers vary considerably in their ability to tolerate client behaviour. Insufficient training has also been implicated in previous research assessing workers' lack of skill in handling their own emotional reactions to difficult client behaviour (Cutler, 1986).

Core Competency 6

The sixth core competency was 'Keep records in a clear concise and accurate format'. The mean score of 88.5% on this subscale was well above the overall attitudes mean of 75%. No significant differences between groups were found regarding scores on this subscale.

Core Competency 7

The seventh core competency was 'Practice safely and ethically'. The mean score of 56% on this subscale was well below the overall attitudes mean of 75%. Workers with less than four years experience scored significantly higher on this subscale than the more experienced workers. Dayshift workers scored significantly higher on this subscale compared to the workers on other shifts. Participants performed poorly on this subscale apart from their collective awareness of the value of supervision. Responses to three items on this subscale raised particular concern about work practice.

Less than two-thirds of participants were aware of the need to break confidentiality if the client or some other individual was at risk. This is standard safe work practice (Davison & Neale, 1997). The number of participants (24%) who gave an incorrect response to the item 'I believe that anything a client tells me in private must remain confidential' was alarming. However, the latter statement must be qualified by the fact that some respondents may have meant 'confidential within the team'. However, the responses as they stand are a concern.

There was further concern with over 80% of participants agreeing that 'I cannot be held responsible for client behaviour when they are away from my workplace'. This could be easily linked to the previous item if workers fail to divulge information that could put an individual at risk and an incident occurs away from the workplace that could have been prevented.

The attitude that a majority of workers professed to hold that they could 'can deal with any client problems' shows an overconfidence that has not been borne out by previous responses.

Core Competency 8

The eighth core competency was 'Comply with legal responsibilities'. The mean score of 71.5% on this subscale was below the overall attitudes mean of 75%. No significant differences between groups were found regarding scores on this subscale. No significant differences were found between groups regarding scores on this item.

The bulk of the attitudes expressed on this scale were in the main helpful. However, two require further discussion.

The opinion expressed by a large number of workers (40.1%) that it is correct practice to withhold privileges from clients until they comply with treatment is unethical and possibly illegal practice. It also is work practice that does not adhere to the recovery approach (Mental Health Commission, 1997).

The erroneous belief held by 18% of participants (20% no opinion) that a support worker can assume legal responsibility for a client needs to be corrected. It is only the responsible clinician that assumes legal responsibility (Gamby, 1995).

Core Competency 9

The ninth core competency was 'Promote the health and welfare of consumers, families and communities'. The mean score of 80% on this subscale was above the overall attitudes mean of 75%. No significant differences between groups were found regarding scores on this subscale.

Workers in general displayed attitudes consistent with the performance criteria for this competency. The anomaly around liaising with drug and alcohol agencies may be contextual, as it may not apply to all workers. This context issue will be examined in more detail further on in this Discussion.

Core Competency 10

The tenth core competency was 'Promote individual professional growth'. The mean score of 87.5% on this subscale was well above the overall attitudes mean of 75%. Dayshift workers scored significantly higher on this subscale than evening, night and variable shift workers. Both participants with a university education and those with a trade certificate or diploma scored higher on this subscale than those who had a high school education or less. The findings here are encouraging.

Summary of attitudes core competencies

Core competency (1)

There are too many shortcomings in responses to this subscale to state confidently that workers are displaying the correct attitude that allows demonstration of this competency.

Core competency (2)

The participants in general displayed helpful attitudes that facilitate effective communication. The areas of concern noted above suggest that workers would benefit from extra training or supervision regarding how to correctly converse with clients, realising the potential of individuals and the value of empathy.

Core competency (3)

Responses to this subscale indicate a lack of appropriate attitudes about how to practice in a culturally appropriate manner. Participant attitudes appeared to reflect confusion as to what culturally appropriate practice is. Again, further education and training would be of benefit.

Core competency (4)

Participants generally do not appear to be able to carry out assessments of clients. This may be due to a lack of training and knowledge of what entails assessment. Unhelpful attitudes were expressed by all groups (regardless of training and education etc) reflecting a general lack of competency regarding assessment. Assessment is an area that requires urgent attention. Participant attitudes displayed both a lack of awareness regarding appropriate practice and of their role as assessors of client mental health status.

Core competency (5)

The large numbers of participants who queried their ability to work with dually diagnosed clients is a concern, as is the attitude towards losing one's temper. However, there were very helpful attitudes expressed regarding participant belief about client recovery that were encouraging. Training and education regarding working with clients with a dual diagnosis and some inappropriate worker behaviour (losing one's temper) would be of value.

Core competency (6)

Participant attitudes towards the value of record keeping suggest that they are generally demonstrating competent attitudes in this area.

Core competency (7)

The attitudes expressed on this subscale do not represent the competence of safe and ethical work practice. Participants in general have displayed a lack of awareness about what constitutes safe and ethical practice to the extent that urgent training and education is required in this area.

Core competency (8)

The majority of attitudes expressed were helpful in the area of complying with legal responsibilities. Some training and education regarding overhelpful attitudes and suspect work practices would benefit workers.

Core competency (9)

Workers could be described as generally competent regarding promotion of the health and welfare of consumers, families and communities.

Core competency (10)

Workers could be described as competent regarding promotion of their individual growth. As with the skills regarding this competency, it is encouraging to report that workers are generally reporting a very positive attitude towards their own individual professional growth.

Work Environment

The assessment of the participant's views of the work environment was carried out using The Ward Atmosphere Scale. There is no total aggregate score on this measure as it designed to evaluate staff perceptions of their work environment through three basic dimensions: Relationship Dimensions, Personal Growth Dimensions and System Maintenance Dimensions.

Relationship Dimensions

These were assessed using the subscales involvement, support and spontaneity. The results showed that participants have characterised their work environments as below average in all these areas.

The relationship dimension has important consequences for client outcomes. When programmes emphasize involvement and support, staff generally find this environment a more pleasing one in which to work (Dorr, Honea & Pozer, 1980). The more satisfying the environment, the better the staff morale, which in turn should reflect superior client outcomes (Frank, 1973, in Cherniss & Egnatios 1978). The staff in this study have characterised the relationship dimension in their work environments in a demonstrably negative fashion. This raises the concern that the philosophy of

commitment to the recovery approach which emphasizes the components of the WAS relationship dimension may not be adhered to in a number of settings.

Personal Growth Dimensions

These were assessed using the subscales personal autonomy, practical orientation, personal problems orientation and anger and aggression. The results for this dimension were similar to the relationship dimension in that they were also represented by low scores on each subscale.

The participant's descriptions of their work environment along the personal growth dimension give the impression that there are few proactive measures being employed by staff in order to facilitate client recovery. They have characterised clients as low in all areas assessed in this dimension. Clients are described as deficient in the requisite skills for independent living and seemingly not encouraged to express and understand their feelings. These descriptions of client functioning are more akin to those one would expect to find in a stereotyped old-style psychiatric institution, not in a more healthy, recovery-promoting environment based in the community. These findings are comparable to previous research which characterised group homes as having an institutional focus with little apparent skill development, and few opportunities for client involvement in decision-making (Lamb, 1979; Mowbray, Greenfield & Freddolino, 1992).

Moos (1996) suggested that programmes that emphasized the personal growth dimensions tended to moderate client's symptoms and strengthen their ability to function independently and so enhance their prospects of successful community living. The results of this workplace evaluation show little evidence of the consistent promotion of any personal growth dimensions.

System Maintenance Dimensions

The subscales that measured these dimensions display the same low scoring seen throughout this instrument. Participants have characterized their workplace as a setting lacking both order and organization. In addition, regarding programme clarity,

clients are depicted as having little knowledge of what to expect day-to-day and with regard to house rules and procedures. Lastly, and a more encouraging finding, the low scoring on the staff control subscale results showed that staff were subscribing to the appropriate non-restrictive ethos of practice desirable for successful client rehabilitation (Anthony, 1996) and recovery (Mental Health Commission, 1997).

Moos (1996), suggests that client outcome is associated with programmes that are well organized and emphasize programme clarity. He found that the level of organization and programme clarity appropriate for successful client outcome was dependent on the client's level of disturbance. The less seriously disturbed clients flourished in a less structured environment, whilst clients with a more serious disability (e.g. schizophrenia), required a more structured environment for optimum outcomes. Given that 60% of respondents described their clients primary disorder as schizophrenia or schizophrenia/bipolar disorder/personality disorder (see demographic information, Appendix G), the description of work environments here appear to be lacking in the appropriate level of structure. The one facet of workplace environment where these respondents appear to be in agreement with universal norms is the extent of staff control. Responses in this study are consistent with the low levels found in other workplace assessments and appear to be appropriate for promotion of recovery and rehabilitation in that clients are allowed to keep their independence and dignity (Moos, 1996).

The results of the work environment assessment showed that the participants have characterised their workplace in a negative manner. Apart from staff control, none of the scores on this instrument's subscales approached the desirable levels that have been associated in previous research with successful client outcome (Moos, 1996). The results of this assessment were hampered by a lower response rate than the skills and attitudes measures but this does not account for the low scoring. The conclusions one can infer from these results are that staff morale is low, and the therapeutic environments are not in line with the philosophy of the recovery approach.

It is interesting to note that Moos (1997) found that senior staff (administrators, directors) in community programmes appraised such programmes in a more positive manner than the staff they oversee. In addition, other research suggests that it is job

context factors such as management support or bureaucracy that play the major contributory role towards staff dissatisfaction (Onyett, Pillinger & Muijen, 1994). The pessimistic description of work environments by these participants could reflect a similar senior staff lack of awareness that may be occurring here. However, without the benefit of further research in this area, one cannot make any definitive conclusions.

Conclusions

Summary of competency assessment

The results of this evaluation of the current competency status of the New Zealand residential mental health support worker indicate that this worker has many of the requisite skills and attitudes deemed necessary for competent work practice. However, the deficiencies in skills and attitudes identified in this research suggest that there are several critical areas of performance that require resolution before one could express with confidence that this is a competent workforce.

The danger of relying on overall measures of skills and attitudes were highlighted by this study. Without the analysis of scoring on each individual subscale, one could have stated that these participants appeared to be generally competent at their work. However, some of the deficiencies in performance criteria identified were in critical areas of client support. If performance criteria were weighted according to relevance in appropriate client support, the areas where more shortcomings were identified would surely be amongst the most significant (knowledge, assessment, intervention and safe and ethical practice).

These deficiencies in skills and attitudes suggest that participants may not in all cases be acting in the prescribed manner that promotes the recovery of clients. The negative appraisal of the work environment may be one way of reflecting key areas of competence. Combined with this 'outcome' measure, the apparent lack of overall competence in assessment and intervention found in this study would in all likelihood impede the rehabilitation and recovery of clients. The workplace atmospheres

reported in this study provide little evidence of client activity that suggests engagement in rehabilitation and recovery. These results mirror the findings of Bratt and Johnson (1988) who found little indication of activity in community accommodation that increases the skills of the residents.

Some of the responses in this study suggest that participant work practices may be in fact impeding recovery. The majority of participants not expressing the helpful attitude that 'clients provide the best solutions to their problems' highlights this point. This seems to indicate a danger that the staff appear to be the givers and clients, the recipients in their relationship. This is an unhealthy distribution of power which would appear to perpetuate the notion that what the staff have to give to this relationship is of more value than the clients' input (Curtis & Hodge, 1994). This relationship is not the type of collaborative one described in the recovery approach where workers are expected to acknowledge the competence of the client (Mental Health Commission, 1997).

Training and education did influence competency in a number of areas but there were still deficits even amongst some staff with superior education and training. Oberlander (1990) reported that this type of worker may have difficulty due to ambiguity as to what their job role is and this may reflect some of the confusion demonstrated in the responses from some participants.

Appropriateness of competencies

The comparison of these competencies with other examples described in the Method section suggests that they are suitable. However, one must exercise caution before making any sweeping statements as the requirements of what is designated a core competency may differ considerably from the requirements (performance criteria) recommended by the NMHWDC (1999). For example, the demonstration of cultural competency, which is universally recommended, has substantially different performance criteria in New Zealand due to the influence of adherence to the principles of the Treaty of Waitangi. In addition, the training of this workforce is

markedly different from country to country, which obviously influences what duties and responsibilities are expected from the worker.

The NMHWDC (1999) recommended core competencies appear to be appropriate for this workforce but the accompanying performance criteria have to be evaluated. The poor scoring on many key items in the skills and attitudes instruments that suggest that many workers are having current difficulty meeting certain performance criteria support the need for this additional investigation. It should be stated that poor performance by participants on a criterion, while informative of current competency status, should not be the guide to whether a criterion is appropriate or not. There are certain responsibilities and duties that are undoubtedly fundamental to the job description of mental health support worker. Whether these participants performed poorly or not regarding these is irrelevant in many cases as to their obvious value in job descriptions.

Another issue needing consideration involves the responses to a small number of items that may have reflected misunderstanding. That is, a few items with a high failure rate may have been due to the wording of the item (see Limitations section). However, given that the vast majority of items were unambiguous, the NMHWDC(1999) recommendation that all mental health workers should be able to demonstrate these competencies according to the performance criteria may be unreasonable for some workers. Some core competencies, assessment, intervention, safe and ethical practice, complying with legal responsibilities and promotion of the health of consumers and so forth, may require some additional criteria to specify exactly what is required of the worker in order for competence to be demonstrated in these areas. The confusion that was demonstrated in some participant responses suggests that there is a need for further clarification. In addition, some performance criteria such as liaising with families and outside agencies may not apply to some members of this workforce and should perhaps be optional. The context of work (e.g. night-shift) may determine what criteria are appropriate.

An area that needs immediate clarification is the addition of a performance criterion that specifies the safety aspects regarding confidentiality. The performance criterion that recommends that workers 'recognise ethical and safety dilemmas as they arise'

does cover this area. However, the poor responses to this issue by participants suggest that it needs to be emphasised perhaps in training.

In addition, the lack of emphasis in the core competencies and performance criteria regarding skills training for clients-a central feature of recovery and rehabilitation-(Anthony et al, 1991) - suggests that competencies would be enhanced by specific reference to this area. Another addition that may be of benefit would be a criterion that emphasizes the collaborative nature of the staff-client relationship. The minimising of the client's role evident in some responses suggests that there is lack of equality in many of these relationships. Lastly, the inclusion of a performance criterion regarding knowledge of medications would be of benefit. A substantial number of participants report that they give clients medication and therefore knowledge of medications and their side effects would be an appropriate addition to the performance criteria that describe providing appropriate intervention for consumers.

Limitations of the study

Participants

There was a low response rate to this survey (13%) that could impact on conclusions that may be drawn from this study. However, perhaps more worrying regarding the competence status of this workforce were the shortcomings displayed by participants. The instruments used to evaluate competency included 256 items. This is a very large number of items. It is a reasonable assumption that these participants were amongst the more motivated members of this workforce and as such, perhaps more competent. The results and conclusions presented here may in fact reflect an overly optimistic view regarding the competency status of this workforce.

Instruments

The fact that the skills and attitudes measures were developed especially for this study may raise concerns over the reliability and validity of these scales. The researcher had

little concern with the scales given the thorough review these measures underwent during construction. The reliability of both the skills and attitudes measures were acceptable according to standard psychometric criteria. It should be noted that both of these measures were self reports. Consequently, there is the possibility that participants provided socially desirable responses rather than the one that truly describes one's skill or attitude. In addition, a few items may be deleted or moved for future research as well as during the preparation of a manuscript for submission. These include skills items 'I believe that dislike of a client impedes effective care' and 'I am uncomfortable with the beliefs and values of some clients', which would be more suitable as attitude rather than skills assessment items. Given the time constraints for this research, it was not possible to relocate or replace these items. However, this will be amended during conversion to a manuscript for publication.

Another limitation that was apparent was the comparatively poor response to the Ward Atmosphere Scale. Unfortunately, the researcher was unaware of a more recent measure developed from the WAS by Moos (1997) specifically for assessment of the social climate of community programmes- Community Orientated Programme Environment Scale. This measure would have undoubtedly achieved a higher response rate and would have been more suitable for these participants' work environments. However, here again, with perhaps more motivated participants filling out the measure, these findings here reflect a less than optimal picture of these settings.

Suggestions for future research

This area generally is one that would benefit from additional research. The findings here suggest that there are many facets of support worker practice where there are major shortcomings. Current findings could be further enhanced by alternative types of competency assessment such as individual interview or assessment in the workplace. The latter would be particularly valuable given the negative appraisal given by participants in this study.

The negative evaluation of the workplace found here should be the subject of further research. It would be interesting to discover how the residents evaluate their environment considering it is their rehabilitation and recovery at stake. In addition, workplace evaluation by the senior staff (directors, provider executives) would be beneficial in providing an overall picture and identifying areas that call for redress.

Lastly, these core competencies were not the only ones formulated by the NMHWDC (1999). Advanced competencies were designed for workers in the mental health field with a formal qualification. The qualification may not necessarily be related to the mental health field (e.g. medical doctor), but these advanced competencies are ones that would be demonstrated after a period of supervision. In addition, specialist competencies have been created for areas such as alcohol and drug, forensic psychiatry and child and family work. The recommended competencies have been laid down. It is a logical progression to evaluate workers' status in these areas according to the competencies.

General Comment

The main aims of this research were to assess the competency of the residential support worker. It was carried out primarily because of the paucity of study regarding these workers in New Zealand. Competency-based assessment will always be a sensitive subject given that one is judging an individual's ability to carry out their job in a successful manner. The research was carried out in the hope that this study would further the small knowledge base in the field.

It must be stressed that the negative workplace evaluation should not be viewed in isolation. It would be all too easy to 'blame the workplace' with the inference that the employer is at fault. However, the findings here suggest that this view is too simplistic.

That deficiencies in core competencies appear to be present in this workforce could be construed in an unhelpful fashion. However, this researcher is of the firm belief that negative findings should be viewed in a constructive manner. A summary of results is

being sent to all participants and providers who took part in this research. This allows both workers and employers to address areas of concern highlighted by this study. It has to be remembered that it is the client who is the most important individual and who deserves the best service possible.

In conclusion, while deficiencies were found, it has to be stressed that many workers demonstrated a number of competencies combined with a commitment to professional growth. In fact, the most positive result from this study was the emphasis practically all the participants placed on promotion of their own professional growth. It is the reported efforts they are making in this area in tandem with some very healthy attitudes that suggests that the deficiencies found here can be eliminated in the future.

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APPENDIX A- National Mental Health workforce Development Coordinating Committee (1999) core competencies and performance criteria.

Basic core competencies

Every mental health worker will be able to:

1 Demonstrate knowledge and understanding of mental health, mental illness and mental health services

Performance criteria

- 1.1 Demonstrate knowledge of mental health and illness, treatments and services including alcohol and drug services.
- 1.2 Integrate knowledge of societal, cultural, psychological, environment, spiritual and belief systems that influence mental health and illness into practice.

2 Communicate effectively

Performance criteria

- 2.1 Use language and terminology appropriate to the needs of the consumer, the group and the setting.
- 2.2 Use appropriate communication style, level and medium for the consumer, the group and the setting.
- 2.3 Be sensitive to and modify approaches for situations in keeping with cultural differences.
- 2.4 Give and receive verbal and non-verbal communication in individual and group settings, with team members and others.
- 2.5 Maintain objectivity and minimise bias.
- 2.6 Respect the rights of the individual, their families and/or significant others.
- 2.7 Apply the principles of informed consent.
- 2.8 Recognise the availability and role of health consumer advocates/interpreters and use them appropriately.
- 2.9 Provide supportive relationships.
- 2.10 Liaise with family members and other resource persons/agencies.
- 2.11 Participate as a team member in a consumer-focused/goal-directed interdisciplinary approach to client care.
- 2.12 Demonstrate empathy with consumer, family/whanau, team members and appropriate others.
- 2.13 Seek and accept critical feedback on understanding of imparted information from consumer, family/whanau, colleagues and others.
- 2.14 Use reflective practice techniques in order to alter practice when indicated.

3 Demonstrate culturally appropriate practice

Performance criteria

- 3.1 Apply the principles of the Treaty of Waitangi to mental health services.
- 3.2 Recognise the impact of the mental health service on a consumer's belief system.
- 3.3 Establish and maintain a supportive relationship with consumers and their families/whanau or significant others.
- 3.4 Evaluate own practice in relation to cultural appropriateness.
- 3.5 Identify own cultural value base and its impact on that of the consumer.
- 3.6 Avoid imposing own belief system on to consumers and others.
- 3.7 Recognise and respect the differing values and beliefs of individual consumers and groups.

4 Assess consumer health needs

Performance criteria

- 4.1 Undertake a basic mental health assessment.
- 4.2 Assess and acknowledge the needs of everyone affected by mental illness.
- 4.3 Assess risk of harm to self and others.
- 4.4 Treat the consumer and his/her family/whanau/resource group with respect.
- 4.5 Practise holistically.
- 4.6 Elicit pertinent data.
- 4.7 Apply observation skills to assess appearance, behaviour, speech, mood, thinking, perception, cognitive function, content of thought, insight and judgement of the consumer.
- 4.8 Recognise the presence of alcohol and drug problems.
- 4.9 Recognise the presence of co-existing disorders.

5 Provide appropriate intervention for consumers

Performance criteria

- 5.1 Use recovery approach as the guiding principle for planning of care and practice.
- 5.2 Work with consumers with a dual diagnosis/co-existing disorders.
- 5.3 Manage difficult behaviour.
- 5.4 Administer calming and restraint techniques when encountered by challenging and threatening behaviour.
- 5.5 Recognise and respond to changes in the consumer, self and the environment.
- 5.6 Provide interventions that achieve agreed goals.
- 5.7 Utilise the skills of other mental health workers.
- 5.8 Administer cardiopulmonary resuscitation.

6 Keep records in a clear, concise and accurate format

Performance criteria

- 6.1 Keep and maintain consumer records that are accurate, timely, objective and legible.
- 6.2 Meet legal, organisational and consumer management requirements.

7 Practise safely and ethically

Performance criteria

- 7.1 Ensure the consumer's and his/her family's right to privacy.
- 7.2 Recognise ethical and safety dilemmas as they arise.
- 7.3 Consult with experienced mental health workers and appropriate others to resolve ethical and safety issues.
- 7.4 Participate in regular ongoing supervision and support forums.

8 Comply with legal responsibilities

Performance criteria

- 8.1 Apply relevant legislation, statutory regulations, policies and protocols that influence mental health practice.
- 8.2 Work in accordance with relevant legislation and codes.
- 8.3 Respect a consumer's right to complain, or refuse treatment or any part of any care without instilling fear of recrimination, penalty or withdrawal of emotional and physical support.
- 8.4 Recognise and support the consumer's and his/her family's/whanau/resource group's right to access information.
- 8.5 Recognise the rights of family/whanau and/or significant others.

9 Promote the health and wellness of consumers, families and communities

Performance criteria

- 9.1 Support the implementation of individual lifestyle planning in accordance with Treaty of Waitangi partnership principles.
- 9.2 Support the implementation of family/whanau-inclusive mental health services.
- 9.3 Ensure that consumers and their families/whanau/resource group have access to relevant information, pertinent education, and support in relation to the diagnosis, illness and mental healthcare options available.
- 9.4 Use communication skills appropriate to the individual or group.
- 9.5 Apply the recovery approach.
- 9.6 Ensure that consumers and their families/whanau are made aware of, and have access to, relevant staff in relation to their mental health care.
- 9.7 Consult with alcohol and drug agencies.

10 Promote individual professional growth

Performance criteria

- 10.1 Identify own role and the roles of others in the mental health team.
- 10.2 Demonstrate self-awareness.
- 10.3 Recognise own learning needs.
- 10.4 Recognise limitations of own abilities and refer to other team member or specialist resource when appropriate.
- 10.5 Seek peer review annually.
- 10.6 Participate in career development strategies
- 10.7 Participate in continuing education activities.
- 10.8 Participate in regular ongoing clinical supervision.

APPENDIX B- Massey University Ethics Committee Approval



4 September 2000

Mr Niall Morrison
34A Newcastle Street
PALMERSTON NORTH

Dear Niall

Re: Human Ethics PN Protocol – 00/109
The assessment of core competencies and skills of the mental health support worker

Thank you for your letter dated 25 August 2000 and the amended protocol.

The amendments you have made and explanations you have given now meet the requirements of the Massey University Human Ethics Committee and the ethics of your protocol are approved.

Any departure from the approved protocol will require the researcher to return this project to the Massey University Human Ethics Committee for further consideration and approval.

Please note that a copy of the amended Information Sheet is required so that it can be placed on your file.

Yours sincerely

A handwritten signature in cursive script that reads "Sylvia Rumball".

Professor Sylvia V Rumball, Chair
Massey University Human Ethics Committee: Palmerston North

cc Dr Kevin R Ronan
Psychology
TURITEA

APPENDIX C- Information Sheet (1)

My name is Niall Morrison. As part of my completion of my Masters degree in Psychology I am undertaking a year long research project under the supervision of Dr. Kevin Ronan. I am interested in exploring mental health support workers views and attitudes in relation to their work practice, in the hopes that insight can be gained into what constitutes the core skills of this profession.

If you choose to participate in this study, you will first be asked to complete two simple questionnaires, and a brief knowledge test, taking around one hour to complete. The questions asked cover the following areas:

- Knowledge of mental health/mental illness
- Effective communication
- Culturally appropriate practice
- Assessment and intervention
- Ethical and legal issues
- Health promotion
- Individual/professional growth

You have the right to decline to take part in this study. The act of sending back a completed survey will imply consent has been given. If you do not wish to participate in this study, then simply throw the survey away. You may refuse to answer any question in either the questionnaires or the quiz.

All responses to both sections of this study will be kept strictly confidential to the researcher and her supervisor. There will be no codes or marks to link your name with your response, so anonymity and confidentiality can be assured.

A summary of the results of this study will be made available at the end of the project. The research findings will be presented as a thesis, and submitted for publication in professional journals. No information that could identify any individual will be presented. If you wish to receive a summary of the results, please fill out the enclosed form and if you wish, return it separately from the questionnaire.

Both my supervisor and myself can be contacted by mail at the above address, or by e-mail at niallpmorrison@hotmail.com.

Thank you for your consideration of participation in my research.

Niall Morrison

APPENDIX D- Information Sheet (2)

My name is Niall Morrison. As part of my completion of my Masters degree in Psychology I am undertaking a year long research project under the supervision of Dr. Kevin Ronan. I am interested in exploring mental health support workers skills and attitudes in relation to their work practice in the hope that insight can be gained into what constitutes the core skills of this profession.

If you choose to participate in this study, you will be asked to complete two questionnaires, followed by a brief exercise on a hypothetical situation that could occur at your workplace. The whole survey takes around 40-50 minutes to complete. The questions asked cover the following areas:

- Knowledge of mental health/mental illness
- Communication skills
- Culturally appropriate practice
- Assessment and intervention
- Ethical and legal issues
- Health promotion
- Individual/professional growth
- You have the right to decline to take part in this study. The act of sending back a completed survey will imply consent has been given. If you do not wish to participate in this study, then simply throw the survey away. You may refuse to answer any question in the questionnaires or exercise.

All responses to questions in this study will be kept strictly confidential to the researcher and his supervisor. There will be no codes or marks to link your name with your response, so anonymity and confidentiality can be assured.

A summary of the results of this study will be made available at the end of the project. The research findings will be presented as a thesis, and submitted for publication in professional journals. No information that could identify any individual will be presented. If you wish to receive a summary of the results, please fill out the enclosed form and if you wish, return it separately from the questionnaire.

Both my supervisor and myself can be contacted by mail at the addresses below, if you have any queries about this research.

Niall Morrison BA(Psychology)
34A Newcastle St.
Palmerston North
Ph: (06)355 1748
Email:npmorrison@hotmail.com

Kevin R. Ronan, Ph.D
Associate Professor of Psychology
Coordinator of Clinical Training
School of Psychology
Massey University
Private Bag 11212
Palmerston North
Ph: (06) 350 5799 (x2069)
Fax: (06) 350 5673

Email: K.R.Ronan@massey.ac.nz

Thank you for your consideration of participation in my research.

Niall Morrison

APPENDIX E-Job Description and Competency Index Sources.

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Appendix F- Skills and Attitudes Survey

Please respond to the following questions by ticking the response TRUE FALSE

- 1 Family relationships have little impact on a client's mental well-being.
- 2 Clients with bipolar disorder often hear voices.
- 3 Anxiety disorders are the most common mental disorder in New Zealand.
- 4 Recurrent thoughts of death/suicide are a common feature of schizophrenia.
- 5 Maori males are much more likely to be admitted to mental health services for drug and alcohol disorders compared to non-Maori males.
- 6 Females are at twice as likely to suffer from depression compared to males.
- 7 Poverty is associated with poor mental health.
- 8 Lonely people are at greater risk of developing a mental disorder.
- 9 People who see visions are experiencing a psychotic episode.
- 10 Physical health and mental health impact on each other.
- 11 I have received training to use language and terminology appropriate to the needs of the client.
- 12 I have received training to use an appropriate communication style for the clients and the setting.
- 13 I have received training in how to communicate in a culturally appropriate manner with clients.
- 14 Non-verbal communication does not tell us much about how a client feels.
- 15 I believe that dislike of a client impedes effective care.
- 16 Clients have limited rights because they are suffering from a psychiatric disorder.
- 17 Clients have the right to refuse treatment.
- 18 I liaise on behalf of clients with community agencies and mental health professionals for services.
- 19 I have received training in how to establish and maintain a supportive relationship with my clients.
- 20 I liaise on behalf of clients with their families.
- 21 I work as a member of a team that approaches client care through preset goals.
- 22 Empathy with a client is critical in my work.

- 23 I actively seek feedback on my understanding of information received from clients, families, colleagues and others.
- 24 I have been trained to use reflective practice techniques to alter my work practice.
- 25 When working with Maori clients, consideration of the implications of the Treaty of Waitangi is always necessary.
- 26 Maori are entitled to preferential treatment services because of the Treaty of Waitangi.
- 27 Maori clients may choose to be assessed by Maori clinicians.
- 28 Maori clients may choose to be assessed in the Maori language.
- 29 Maori clients may choose to be treated by traditional Maori healers.
- 30 I am familiar with the various models of Maori models of wellness e.g. 'Te Whare Tapa Wha'.
- 31 Western medical practices may be unsuitable for some minority cultures.
- 32 Maori mental health services agree that inclusion of a Maori client's family is a very important facet of the rehabilitation process for the client.
- 33 I do evaluate my own work practice in relation to cultural appropriateness.
- 34 I monitor how my own cultural values impact on how I care for clients.
- 35 I avoid imposing my values on clients.
- 36 I am uncomfortable with the beliefs and values of some clients.
- 37 I have been trained to carry out a basic mental health assessment of clients.
- 38 I assess the needs of family members who are affected by my client's illness.
- 39 Suicide in mentally ill clients is associated with a history of self-harm.
- 40 I treat my clients and their families with respect.
- 41 I practice holistically.
- 42 A client's family history is not relevant to my work.
- 43 A client's general appearance has no relevance in the assessment of their needs.
- 44 I have been trained to recognize the presence of alcohol and drug problems.
- 45 It is not uncommon for individuals who suffer from schizophrenia to have depression as a co-existing disorder.
- 46 The recovery approach to rehabilitation is standard practice in my workplace.
- 47 The value of the recovery approach has been shown in the institutional environment.

- 48 Recovery means a client's return to full health.
- 49 I have been trained to work with clients who have a dual diagnosis.
- 50 I have been trained to manage difficult client behaviour.
- 51 I have been trained to administer calming and restraint techniques when I encounter challenging and threatening behaviour.
- 52 I acknowledge and respond to any change in client behaviour.
- 53 I work with the clients to achieve agreed upon goals.
- 54 I seek out other mental health workers to help provide appropriate intervention for clients.
- 55 I am trained in cardiopulmonary resuscitation.
- 56 I give clients their medication.
- 57 Tardive dyskinesia can result from taking a wide range of psychiatric medications.
- 58 I read client notes.
- 59 I record changes in client's mood.
- 60 My organization requires me to be familiar with how to record and use client notes.
- 61 Mentally ill individuals have forfeited the right to privacy.
- 62 Breaking client confidentiality if I believe the client or others are at risk is acceptable practice.
- 63 I participate in educational activities that relate to my work.
- 64 Contacting my supervisor when feeling unsure about how to deal with client behaviour is a necessary part of competent practice.
- 65 I consult with my supervisor regarding my work practice in scheduled supervision.
- 66 I have read the 1992 Mental Health Act(Compulsory Treatment and Assessment).
- 67 A Duly Authorised Officer is either a medical doctor (e.g., a psychiatrist) or a clinical psychologist.
- 68 A 'Special Patient' can be forced to have electro convulsive therapy (ECT).
- 69 The sanctity of the client/expert bond of confidentiality may be broadened to include family members in the case of Maori and other clients.
- 70 Families have the right to commit clients to psychiatric institutions.

- 71 I implement individual lifestyle planning for my clients in accordance with the Treaty of Waitangi partnership principles.
- 72 I liaise with Maori mental health workers or with those in the community regarding the appropriateness of care for Maori clients.
- 73 I ensure that clients and their families have access to information, education and support in relation to the client's diagnosis, illness and mental healthcare options available.
- 74 I apply the recovery approach in my work practice.
- 75 I ensure that clients and their families are made aware of, and have access to, relevant resources in relation to their mental health care.
- 76 I liaise with the staff at local drug and alcohol agencies.
- 77 I have a job description that defines my roles and responsibilities.
- 78 Self-awareness is an important part of my job.
- 79 I recognize that I have learning needs regarding my job.
- 80 If unsure I will ask for assistance.
- 81 I seek peer review of my job performance.
- 82 Since starting in this area I have been promoted to a position that involves more responsibility in the area of client care.
- 83 I am actively engaged in my own career development.
- 84 I participate in regular ongoing supervision.

Please rate your attitude to the following statements on this scale by circling the appropriate response.

1-Strongly Disagree.

2-Disagree.

3-No Opinion.

4-Agree.

5-Strongly Agree.

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1. The Treaty of Waitangi has little relevance in the day-to-day care of Maori clients.	1	2	3	4	5
2. I believe that Western medical practices are of no benefit to Maori clients.	1	2	3	4	5
3. I believe that I must always liaise with a Maori client's family in order to provide appropriate care.	1	2	3	4	5
4. I believe that too much emphasis on culturally appropriate care can hinder rehabilitation of clients.	1	2	3	4	5
5. I prefer to work with clients of my own culture.	1	2	3	4	5
6. I believe my own background is bound to affect how I interact with clients.	1	2	3	4	5
7. In real terms there is very little difference between cultures regarding general beliefs and values.	1	2	3	4	5
8. Only trained professionals should carry out mental health assessment of clients.	1	2	3	4	5
9. Mental health workers should never get upset by client behaviour.	1	2	3	4	5
10. I never feel at risk from clients.	1	2	3	4	5
11. I have little respect for some client's families.	1	2	3	4	5
12. I believe that assessment means looking at all facets of a client's life, not just their symptoms.	1	2	3	4	5
13. I believe that assessment of client needs does not have to be a formal procedure.	1	2	3	4	5

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
14. Alcohol and drug problems are minor client problems compared to their psychiatric illness.	1	2	3	4	5
15. I believe that clients use their illness as an excuse for weird behaviour when their behaviour is not typical of their diagnosed disorder.	1	2	3	4	5
16. I believe that the recovery approach should be the guiding principle for planning of care and practice.	1	2	3	4	5
17. I find it difficult to work with dually diagnosed clients.	1	2	3	4	5
18. I believe that some clients would be more suited to a hospital environment.	1	2	3	4	5
19. I believe that in reality there is little we can do to rehabilitate clients.	1	2	3	4	5
20. I believe that PRN medications are the most useful interventions for client problems.	1	2	3	4	5
21. I believe that most mental health professionals do not spend enough time with clients to really understand client problems.	1	2	3	4	5
22. I believe that all staff should be trained in cardiopulmonary resuscitation.	1	2	3	4	5
23. I believe that too much time is spent on administration duties.	1	2	3	4	5
24. I believe that client notes are of little value in the care of clients.	1	2	3	4	5
25. I believe that anything a client tells me in private must remain confidential.	1	2	3	4	5
26. I cannot be held responsible for client behaviour when they are away from my workplace.	1	2	3	4	5
27. I feel confident that I can deal with any client problems.	1	2	3	4	5
28. I do not really need supervision or assistance from other staff.	1	2	3	4	5
29. I believe the 1992 Mental Health Act does not really apply to my day-to-day work practice.	1	2	3	4	5
30. I am willing to be assigned legal responsibility for a client's treatment.	1	2	3	4	5

	Strongly disagree	Disagree	No Opinion	Agree	Strongly disagree
31. I believe it may be necessary in certain cases to withdraw client privileges until they participate in treatment.	1	2	3	4	5
32. I believe that cultural factors are not a relevant in terms of legal issues of clients.	1	2	3	4	5
33. I believe that a client's family should have the right to mediate with health professionals on behalf of the client.	1	2	3	4	5
34. I support the implementation of individual lifestyle planning for clients in accordance with the Treaty of Waitangi partnership principles.	1	2	3	4	5
35. I support the implementation of family/whanau-inclusive mental health services.	1	2	3	4	5
36. I believe there is not enough information and education for client's families in relation to the client's diagnosis, illness and mental healthcare options available.	1	2	3	4	5
37. I believe the recovery approach is the optimal approach for mentally ill clients.	1	2	3	4	5
38. I believe that consumers and families are not made aware that they can query aspects of a client's mental health care.	1	2	3	4	5
39. I believe that consultation with local alcohol and drug agencies is an important part of my job.	1	2	3	4	5
40. I am not afraid to ask colleagues for help.	1	2	3	4	5
41. I believe I know as much as possible about my job.	1	2	3	4	5
42. I feel stupid asking supervisors for help.	1	2	3	4	5
43. I believe that feedback from my peers is useful in assessing my job	1	2	3	4	5
44. I believe that I can go no further in this career.	1	2	3	4	5

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
45. I believe that further education would not impact on the quality of my care for clients.	1	2	3	4	5
46. At this stage I believe that I no longer need clinical supervision.	1	2	3	4	5
47. I believe that mentally ill people don't understand that they are ill.	1	2	3	4	5
48. I believe that medication is the most effective way to treat clients.	1	2	3	4	5
49. I believe that clients use their illness as an excuse for their behaviour.	1	2	3	4	5
50. I believe that psychiatrists play little role in the rehabilitation of clients.	1	2	3	4	5
51. I believe that most clients would be better suited to a hospital environment than a community setting.	1	2	3	4	5
52. I believe that too much emphasis is placed on factors such as spiritual beliefs as a factor in mental illness.	1	2	3	4	5
53. I believe that mental health workers focus too much on individual-based change and not enough on community-based change in mental illness prevention.	1	2	3	4	5
54. I believe that we are over-sensitive to cultural factors in mental illness.	1	2	3	4	5
55. I believe that an individual's personality predisposes him or her to mental illness.	1	2	3	4	5
56. I believe that Government economic policy can influence the population's mental health status.	1	2	3	4	5
57. I believe that being formal in conversation with clients is necessary.	1	2	3	4	5
58. I talk to clients in the same manner I talk to anyone (e.g. friends).	1	2	3	4	5
59. I am willing to change my communication style based on a person's culture.	1	2	3	4	5
60. I believe that ongoing communication with clients and team members is an important part of my work practice.	1	2	3	4	5
61. I spend more time working with clients I like compared to those that I don't like.	1	2	3	4	5

	Strongly disagree	Disagree	No opinion	Agree	Strongly Agree
62. Clients do not know what is best for themselves so they should have limited rights.	1	2	3	4	5
63. I can understand staff losing their temper in front of clients.	1	2	3	4	5
64. I believe that community agencies are of little use to my clients.	1	2	3	4	5
65. I believe that supportive relationships are not possible with some clients-e.g. hostile individuals.	1	2	3	4	5
66. I believe that liaising with client's families is an integral part of my work practice.	1	2	3	4	5
67. Clients provide the best solutions to their problems.	1	2	3	4	5
68. I believe that I should regularly demonstrate my understanding of how my clients feel directly to those clients.	1	2	3	4	5
69. I believe that seeking and accepting critical feedback from clients and colleagues is a necessary part of my work practice.	1	2	3	4	5
70. I believe that clients should not have the right to refuse treatment.	1	2	3	4	5
71. I believe that my roles and responsibilities are not clear.	1	2	3	4	5
72. I believe that observing my clients day-to-day is enough to accurately assess their needs	1	2	3	4	5
73. I believe that the use of reflective practice techniques to alter my work practice enables me to provide better care for clients	1	2	3	4	5

Appendix G – Demographic Information.

My date of birth

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21	1	.8	.9	.9
	23	2	1.6	1.9	2.8
	24	1	.8	.9	3.7
	25	3	2.5	2.8	6.5
	26	3	2.5	2.8	9.3
	27	1	.8	.9	10.2
	28	3	2.5	2.8	13.0
	29	5	4.1	4.6	17.6
	30	2	1.6	1.9	19.4
	31	1	.8	.9	20.4
	32	4	3.3	3.7	24.1
	33	1	.8	.9	25.0
	36	5	4.1	4.6	29.6
	37	1	.8	.9	30.6
	38	1	.8	.9	31.5
	39	5	4.1	4.6	36.1
	40	1	.8	.9	37.0
	41	1	.8	.9	38.0
	42	5	4.1	4.6	42.6
	43	2	1.6	1.9	44.4
	44	10	8.2	9.3	53.7
	45	7	5.7	6.5	60.2
	46	2	1.6	1.9	62.0
	47	3	2.5	2.8	64.8
	48	7	5.7	6.5	71.3
	49	4	3.3	3.7	75.0
	50	4	3.3	3.7	78.7
	51	4	3.3	3.7	82.4
	52	1	.8	.9	83.3
	53	4	3.3	3.7	87.0
	54	4	3.3	3.7	90.7
	55	1	.8	.9	91.7
	56	3	2.5	2.8	94.4
	58	1	.8	.9	95.4
	59	2	1.6	1.9	97.2
	60	1	.8	.9	98.1
	61	1	.8	.9	99.1
	66	1	.8	.9	100.0
	Total	108	88.5	100.0	
Missing	System	13	11.5		
Total		121	100.0		

I am male,female

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	30	24.6	26.1	26.1
	female	85	69.7	73.9	100.0
	Total	115	94.3	100.0	
Missing	System	6	5.7		
Total		121	100.0		

My ethnic background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	asian	4	3.3	3.5	3.5
	New Zealand European	72	59.0	63.2	66.7
	New Zealand Maori	15	12.3	13.2	79.8
	Pacific Islander	1	.8	.9	80.7
	Mixed European/Maori	8	6.6	7.0	87.7
	European	9	7.4	7.9	95.6
	New Zealander	4	3.3	3.5	99.1
	Australian	1	.8	.9	100.0
	Total	114	93.4	100.0	
	American	1	.8		
Missing	System	6	5.7		
Total		121	100.0		

What specific training have you had or are currently undertaking for your job

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	professional certificate or diploma	58	47.5	50.9	50.9
	university degree	19	15.6	16.7	67.5
	inhouse training	34	27.9	29.8	97.4
	common sense/life	3	2.5	2.6	100.0
	Total	114	93.4	100.0	
Missing	System	7	6.6		
Total		121	100.0		

My position is fulltime,part-time or casual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fulltime	83	68.0	72.2	72.2
	Part-time	28	23.0	24.3	96.5
	On-call casual	3	2.5	2.6	99.1
	Variable	1	.8	.9	100.0
	Total	115	94.3	100.0	
Missing	System	6	5.7		
Total		121	100.0		

How much schooling have you had

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no school qualification	13	10.7	11.5	11.5
	school certificate passed in one or more subjects	10	8.2	8.8	20.4
	sixth form certificate	9	7.4	8.0	28.3
	university bursary or scholarship	4	3.3	3.5	31.9
	trade or professional certificate or diploma	35	28.7	31.0	62.8
	university undergraduate degree or diploma	22	18.0	19.5	82.3
	post graduate qualification	20	16.4	17.7	100.0
	Total	113	92.6	100.0	
	police training	1	.8		
Missing	System	7	6.6		
Total		121	100.0		

Years of experience as a mental health worker

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	23	18.9	20.9	20.9
	2	13	10.7	11.8	32.7
	3	14	11.5	12.7	45.5
	4	12	9.8	10.9	56.4
	5	10	8.2	9.1	65.5
	6	19	15.6	17.3	82.7
	7	2	1.6	1.8	84.5
	8	2	1.6	1.8	86.4
	10	9	7.4	8.2	94.5
	11	1	.8	.9	95.5
	12	1	.8	.9	96.4
	14	2	1.6	1.8	98.2
	20	1	.8	.9	99.1
	26	1	.8	.9	100.0
	Total	110	90.2	100.0	
	9	4	3.3		
Missing	System	7	6.6		
Total		121	100.0		

I usually work days, evenings, nights or variable shifts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Days	71	58.2	62.3	62.3
	Evenings	1	.8	.9	63.2
	nights	11	9.0	9.6	72.8
	Variable shifts	31	25.4	27.2	100.0
	Total	114	93.4	100.0	
Missing	System	7	6.6		
Total		121	100.0		

Our clients primary disorder is

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Schizophrenia	49	40.2	46.7	46.7
	Schizophrenia/bipolar	13	10.7	12.4	59.0
	Schizophrenia/personality disorder	1	.8	1.0	60.0
	Mood disorder	3	2.5	2.9	62.9
	Dual diagnosis	8	6.6	7.6	70.5
	all types	17	13.9	16.2	86.7
	Axis 1	6	4.9	5.7	92.4
	Alcohol and drugs	2	1.6	1.9	94.3
	Family	1	.8	1.0	95.2
	Acute	1	.8	1.0	96.2
	Head injury	2	1.6	1.9	98.1
	Schizoaffective disorder	1	.8	1.0	99.0
	Level 3	1	.8	1.0	100.0
	Total	105	86.1	100.0	
	Level 1,2	1	.8		
Missing	System	15	13.1		
Total		121	100.0		

Appendix H – Providers and numbers of support workers.

Provider	Potential Participants
Accommodation for Mental Health Society	50
Arahura Charitable Trust	6
Aroha Ki Te Tamariki	5
Ashburton Community Services	2
Avenues Trust	5
Awhina Wahine Wellington Inc	2
Bainbridge House	8
Braeburn House Ltd	4
Braemore Lodge	3
Campbell House Trust	4
Contact Trust Rotorua	2
Caroline House Inc	1
Carrick House Ltd	4
Cassel House	6
Centre 401	9
Challenge Trust	45
Dayspring Trust	28
Deo Gratias Trust	6
Earthlink Inc	12
Forbury Trust	4
Framework Trust	20
Gateway Housing Trust	19
Glenbrook House	4

Hauro O Te Atiawa	10
He Putea Atawhai Trust	15
Higher Ground Drug Rehabilitation Trust	9
Kapiti Crossroads Trust	4
Kapiti Welcome Trust	2
Karldon House Trust	10
Lifelinks	12
Maranga House Trust	8
Mash Trust	100
Mental Health Inc	7
Mount View Residential Trust	2
Northland Mental Health Services	10
Ninety-one Carrol St	9
Northcare Trust	50
Odyssey House	10
Otago Manic Depressive Trust	4
PACT Group	70
Pretoria Lodge	7
Psychiatric Consumer Support and Advisory Trust	3
Ranworth Healthcare	25
Raumano Mental Health Trust	2
Richmond Fellowship NZ Inc	25
Sarona Community Trust	9
St Marks Society	8
Step Ahead Trust	6

Stop Trust	10
Te Korowai Araoha	90
Te Kotuku Ki Te Rangi	34
Te Maunga Hauora Trust	6
Te Rito Arahi	3
Te Roopu Awhina Ki Porirua	3
Te Toka O Maru O Taranaki Trust	20
Te Whanau O Waipareira Trust	6
The Cottage Farm Trust	1
Tirohia Te Kopere Trust	2
Turning Point	11
Vincent House	14
Vincentian Recovery Trust	4
Waahi Whaanui Trust	3
Wellink	70
Western Bay Of Plenty Mental Health Trust Inc	2
Whanganui Community Living Trust	13
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	958

Appendix I – Item frequency scores.

Frequency scores for core competency skill subscale 1

Item	<i>n</i>	Correct	Incorrect
Family relationships have little impact on client's mental health*	121	113(93.4%)	8(6.6%)
Clients with bipolar disorder often hear voices*	121	84(69.7%)	37(30.3%)
Anxiety disorders are the most common mental disorder in New Zealand	121	71(59%)	50(41%)
Recurrent thoughts of death/suicide are a common feature of schizophrenia	121	62(51.6%)	59(48.4%)
Maori males are much more likely to be admitted to mental health services for drug and alcohol disorders compared to non-Maori males	121	91(75.4%)	30(24.6%)
Females are twice as likely to suffer from depression as males	121	78(64.8%)	43(35.2%)
Poverty is associated with poor mental health	121	61(50.8%)	60(49.2%)
Lonely people are at greater risk of developing a mental disorder	121	63(52.5%)	58(47.5%)
People who see visions are experiencing a psychotic episode*	121	79(65.6%)	42(34.4%)
Physical and mental health impact on each other	121	110(91%)	11(9%)

* Correct response to item-false

Frequency scores for core competency skill subscale 2

Item	<i>n</i>	Correct	Incorrect
I have received training to use language and terminology appropriate to the needs of the clients	121	89(73.8%)	32(26.2%)
I have received training to use an appropriate communication style for the clients and setting	121	101(83.6%)	20(16.4%)
I have received training in how to communicate in a culturally appropriate manner with clients	121	96(79.5%)	25(20.5%)
Non-verbal communication does not tell us much about how a client feels*	121	105(86.9%)	16(13.1%)
Dislike of a client impedes effective care*	121	35(29.5%)	86(70.5%)
Clients have limited rights because they are suffering from a psychiatric disorder*	121	100(82.8%)	21(17.2%)
Clients have the right to refuse treatment	121	104(86.1%)	17(13.9%)
I liaise on behalf of clients with community agencies and mental health professionals for services	121	104(86.1%)	17(13.9%)
I have received training in how to establish and maintain a supportive relationship with my clients	121	100(82.8%)	21(17.2%)
I liaise on behalf of clients with their families	121	87(72.1%)	34(27.9%)
I work as a member of a team that approaches client care through preset goals	121	90(74.6%)	31(25.4%)
Empathy with a client is critical in my work	121	111(91.8%)	10(8.2%)
I actively seek feedback on my understanding of information received from clients, families, colleagues and others	121	109(90.2%)	12(9.8%)
I have been trained to use reflective practice techniques to alter my work practice	121	80(66.4%)	41(33.6%)

* Correct response to item-false

Frequency scores for core competency skill subscale 3

Item	<i>n</i>	Correct	Incorrect
When working with Maori clients, consideration of the implications of the Treaty of Waitangi is always necessary*	121	97(80.3%)	24(19.7%)
Maori are entitled to preferential treatment services because of the Treaty of Waitangi	121	93(77.0%)	28(23.0%)
Maori clients may choose to be assessed by Maori clinicians	121	118(97.5%)	3(2.5%)
Maori clients may choose to be assessed in the Maori language	121	114(94.3%)	7(5.7%)
Maori clients may choose to be assessed by traditional Maori healers	121	114(94.3%)	7(5.7%)
I am familiar with the various Maori models of wellness e.g. 'Te Whare Tape Wha'	121	73(60.7%)	48(39.3%)
Western medical practices may be unsuitable for some minority cultures	121	106(87.7%)	15(12.3%)
Maori mental health services agree that inclusion of a Maori client's family is a very important facet of the rehabilitation process for the client	121	116(95.9%)	5(4.1%)
I do evaluate my own work practice in relation to cultural appropriateness	121	109(90.2%)	12(9.8%)
I monitor how my own cultural values impact on how I care for clients	121	108(89.3%)	13(10.7%)
I avoid imposing my values on clients	121	111(91.8%)	10(8.2%)
I am uncomfortable with the beliefs and values of some clients*	121	75(62.3%)	46(37.7%)

*Correct response to item-false

CORRECTION

Please note that the correct response to the item 'Maori are entitled to preferential treatment services because of the Treaty of Waitangi' is FALSE. The omission of the asterisk (*) was due to a printing error.

Frequency scores for core competency subscale 4

Item	<i>n</i>	Correct	Incorrect
I have been trained to carry out a basic mental health assessment of clients	121	75(62.3%)	46(37.7%)
I assess the needs of family members who are affected by my client's illness	121	51(42.6%)	70(57.4%)
Suicide in mentally ill clients is associated with a history of self-harm	121	51(42.6%)	70(57.4%)
I treat my clients and families with respect	121	119(98.4%)	2(1.6%)
I practice holistically	121	101(83.6%)	20(16.4%)
A client's family history is not relevant to my work*	121	108(89.3%)	13(10.7%)
A client's general appearance has no relevance in the assessment of their needs*	121	86(71.3%)	35(28.7%)
I have been trained to recognize the presence of alcohol and drug problems	121	83(68.9%)	38(31.1%)
It is not uncommon for individuals who suffer from schizophrenia to have depression as a co-existing disorder	121	106(87.7%)	15(12.3%)

*Correct response to item-false

Frequency scores for core competency skill subscale 5

Item	<i>n</i>	Correct	Incorrect
The recovery approach to rehabilitation is standard practice in my workplace	121	106(87.7%)	15(12.3%)
The value of the recovery approach has been shown in the institutional environment*	121	41(34.4%)	80(65.6%)
Recovery means a client's return to full health*	121	76(63.1%)	45(36.9%)
I have been trained to work with clients who have a dual diagnosis	121	61(50.8%)	60(49.2%)
I have been trained to manage difficult client behaviour	121	100(82.8%)	21(17.2%)
I have been trained to administer calming and restraint techniques when I encounter challenging and threatening behaviour	121	65(54.1%)	56(45.9%)
I acknowledge and respond to any change in client behaviour	121	113(93.4%)	8(6.6%)
I work with the clients to achieve agreed upon goals	121	112(92.6%)	9(7.4%)
I seek out other mental health workers to help provide appropriate intervention for clients	121	112(92.6%)	9(7.4%)
I am trained in cardiopulmonary resuscitation	121	108(89.3%)	13(10.7%)
I give clients their medication*	121	37(31.1%)	83(68%)
Tardive dyskinesia can result from taking a wide range of medications*	121	17(14.8%)	104(85.2%)

*Correct response to item-false

Frequency scores for core competency skill subscale 6

Item	<i>n</i>	Correct	Incorrect
I read client notes	121	115(95.1%)	6(4.9%)
I record changes in client mood	121	108(89.3%)	13(10.7%)
My organization requires me to be familiar with how to record and use client notes	121	112(92.6%)	9(7.4%)

Frequency scores for core competency skill subscale 7

Item	<i>n</i>	Correct	Incorrect
Mentally ill individuals have forfeited the right to privacy*	121	113(93.4%)	8(6.6%)
Breaking client confidentiality if I believe the client or others are at risk is acceptable practice	121	97(80.3%)	24(19.7%)
Contacting my supervisor when feeling unsure about how to deal with client behaviour is a necessary part of competent practice	121	118(97.5%)	3(2.5%)
I consult with my supervisor regarding my work practice in scheduled supervision	121	110(91.0%)	11(9.0%)

* Correct response to item-false

Frequency scores for core competency skill subscale 8

Item	<i>n</i>	Correct	Incorrect
I have read the 1992 Mental Health Act (Compulsory Treatment and Assessment)	121	89(73.8%)	32(26.2%)
A Duly Authorised Officer is either a medical doctor (e.g. a psychiatrist) or a clinical psychologist*	121	58(48.4%)	63(51.6%)
A 'Special Patient' can be forced to have electroconvulsive therapy (ECT)	121	10(9.0%)	111(91.0%)
The sanctity of the client/expert bond of confidentiality may be broadened to include family members in the case of Maori and other clients	121	63(52.5%)	58(47.5%)
Families have the right to commit clients to psychiatric institutions*	121	44(36.9%)	77(63.1%)

* Correct response to item-false

Frequency scores for core competency skill subscale 9

Item	<i>n</i>	Correct	Incorrect
I implement individual lifestyle planning for my clients in accordance with the Treaty of Waitangi principles	121	73(60.7%)	48(39.3%)
I liaise with Maori mental health workers or with those in the community regarding appropriateness of care for Maori clients	121	90(74.6%)	31(25.4%)
I ensure that clients and their families have access to information, education and support in relation to the client's diagnosis, illness and mental healthcare options available	121	105(86.9%)	16(13.1%)
I apply the recovery approach in my work practice	121	106(87.7%)	15(12.3%)
I ensure that clients and their families are made aware of, and have access to, relevant resources in relation to their mental health care	121	108(89.3%)	13(10.7%)
I liaise with the staff at local drug and alcohol agencies	121	76(63.1%)	45(36.9%)

Frequency scores for core competency skill subscale 10

Item	<i>n</i>	Correct	Incorrect
I have a job description that defines my roles and responsibilities	121	113(93.4%)	8(6.6%)
Self-awareness is an important part of my job	121	116(95.9%)	5(4.1%)
I recognize that I have learning needs regarding my job	121	115(95.1%)	6(4.9%)
If unsure I will ask for assistance	121	117(96.7%)	4(3.3%)
I seek peer review of my job performance	121	107(88.5%)	14(11.5%)
Since starting in this area I have been promoted to a position that involves more responsibility in the area of client care	121	70(58.2%)	51(41.8%)
I am actively engaged in my own career development	121	102(84.4%)	19(15.6%)
I participate in regular ongoing supervision	121	99(82.0%)	22(18.0%)
I participate in educational activities that relate to my work	121	113(93.4%)	8(6.6%)

Frequency scores for core competency attitude subscale 1

Item	<i>n</i>	Helpful Attitude	No opinion	Unhelpful Attitude
I believe that mentally ill people don't understand that they are ill*	121	93(77%)	11(9%)	17(13.9%)
I believe that medication is the most effective way to treat clients*	121	71(59%)	10(8.2%)	40(32.8%)
I believe that clients use their illness as an excuse for their behaviour*	121	67(55.7%)	15(12.3%)	39(32%)
I believe that most clients would be better suited to a hospital environment than a community setting*	121	110(91%)	3(2.5%)	8(6.6%)
I believe that too much emphasis is placed on factors such as spiritual beliefs as a factor in mental illness*	121	94(77.9%)	19(15.6%)	8(6.6%)
I believe that we are over-sensitive to cultural factors in mental illness*	121	75(62.3%)	19(15.6%)	27(22.1%)
I believe that a person's personality predisposes them to mental illness	121	30(24.6%)	22(18.0%)	69(57.4%)
I believe that Government economic policy can influence the population's mental health status	121	85(70.5%)	16(13.1%)	20(16.4%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 2

Item	<i>n</i>	Helpful Attitude	No opinion	Unhelpful Attitude
I believe that being formal in conversation with clients is necessary*	121	97(80.3%)	10(8.2%)	14(11.5%)
I talk to clients in the same manner that I talk to anyone (e.g. friends)*	121	24(19.7%)	21(17.2%)	76(63.1%)
I am willing to change my communication style based on a person's culture	121	99(82.0%)	13(10.7%)	9(7.4%)
I believe that ongoing communication with clients and team members is an important part of my work practice	121	117(96.7%)	2(1.6%)	2(1.6%)
I spend more time working with clients I like compared to those I don't like*	121	96(79.5%)	5(4.1%)	20(16.4%)
Clients do not know what is best for them so they should have limited rights*	121	108(89.3%)	6(4.9%)	7(5.7%)
I believe that community agencies are of little use to my clients*	121	114(94.3%)	3(2.5%)	4(3.3%)
I believe that supportive relationships are not possible with some clients –e.g. hostile individuals*	121	89(73.8%)	16(13.1%)	16(13.1%)
I believe that liaising with client's families is an integral part of my work practice	121	93(77.0%)	12(9.8%)	16(13.1%)
Clients provide the best solutions to their problems	121	58(48.4%)	25(20.5%)	38(31.1%)
I believe that I should regularly demonstrate my understanding of how my clients feel directly to those clients	121	75(62.3%)	20(16.4%)	26(21.3%)
I believe that seeking and accepting critical feedback from clients and colleagues is a necessary part of my work practice	121	110(91.0%)	7(5.7%)	4(3.3%)
I believe that clients should not have the right to refuse treatment*	121	91(75.4%)	11(9.0%)	19(15.6%)
I believe that the use of reflective practice techniques to alter my work practice enables me to provide better care for clients	121	91(75.4%)	20(16.4%)	10(8.2%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 3

Item	<i>n</i>	Helpful Attitude	No opinion	Unhelpful Attitude
The Treaty of Waitangi has little relevance in the day-to-day care of Maori clients*	121	73(60.7%)	26(21.3%)	22(18.0%)
I believe that Western medical practices are of no benefit to Maori clients*	121	107(88.5%)	5(4.1%)	9(7.4%)
I believe that I must always liaise with a Maori client's family in order to provide appropriate care*	121	62(51.6%)	21(17.2%)	38(31.1%)
I believe that too much emphasis on culturally appropriate care can hinder rehabilitation of clients*	121	59(49.2%)	18(14.8%)	44(36.1%)
I believe my own background is bound to affect how I interact with clients	121	81(67.2%)	13(10.7%)	26(21.3%)
In real terms there is very little difference between cultures regarding general beliefs and values*	121	94(77.9)	7(5.7%)	20(16.4%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 4

Item	<i>n</i>	Helpful Attitude	No Opinion	Unhelpful Attitude
Only trained professionals should carry out mental health assessment of clients*	121	36(29.5%)	31(25.4%)	53(44.3%)
Mental health workers should never get upset by client behaviour*	121	85(70.5%)	10(8.2%)	26(21.3%)
I have little respect for some client's families*	121	85(70.5%)	17(13.98%)	19(15.6%)
I believe that assessment means looking at all facets of a client's life, not just their symptoms	121	115(95.1%)	2(1.6%)	4(3.3%)
I believe that assessment of client needs does not have to be a formal procedure*	121	32(26.2%)	28(23.0%)	61(50.8%)
Alcohol and drug problems are minor client problems compared to their psychiatric illness*	121	111(91.8%)	6(4.9%)	4(3.3%)
I believe that clients use their illness as an excuse for weird behaviour when their behaviour is not typical of their diagnosed disorder*	121	59(49.2%)	23(18.9%)	39(32%)
I believe that observing my clients day-to-day is enough to accurately assess their needs*	121	77(63.9%)	18(14.8%)	26(21.3%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 5

Item	<i>n</i>	Helpful Attitude	No opinion	Unhelpful Attitude
I believe the recovery approach should be the guiding principle for planning of care and practice	121	95(78.7%)	16(13.1%)	10(8.2%)
I believe that some clients would be more suited to a hospital environment	121	60(50.0%)	22(18.0%)	39(32.0%)
I find it difficult to work with dually diagnosed clients*	121	59(49.2%)	24(19.7%)	38(31.1%)
I believe in reality there is little we can do to rehabilitate clients*	121	113(93.4%)	3(2.5%)	5(4.1%)
I believe that PRN medications are the most useful interventions for clients*	121	82(68.0%)	22(18.0%)	17(13.9%)
I believe that all staff should be trained in cardiopulmonary resuscitation	121	106(87.7%)	13(10.7%)	2(1.6%)
I can understand staff losing their temper in front of clients*	121	76(63.1%)	8(6.6%)	37(30.3%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 6

Item	<i>n</i>	Helpful Attitude	No opinion	Unhelpful Attitude
I believe that client notes are of little value in the care of clients*	121	103(85.2%)	8(6.6%)	10(8.2%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 7

Item	<i>n</i>	Helpful Attitude	No opinion	Unhelpful Attitude
I believe that anything a client tells me in private must remain confidential*	121	70(58.2%)	21(17.2%)	30(24.6%)
I cannot be held responsible for client behaviour when they are away from my workplace*	121	21(17.2%)	28(23.0%)	72(59.8%)
I feel that I can deal with any client problems*	121	43(35.2%)	14(11.5%)	64(53.3%)
I don't really need supervision or assistance from other staff*	121	106(87.7%)	5(4.1%)	10(8.2%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 8

Item	<i>n</i>	Helpful Attitude	No opinion	Unhelpful Attitude
I believe the 1992 Mental Health Act does not really apply to my day-to-day work *	121	80(66.4%)	24(19.7%)	17(13.9%)
I am willing to be assigned legal responsibility for a client's treatment*	121	75(62.3%)	24(19.7%)	22(18.0%)
I believe it necessary in certain cases to withdraw client privileges until they participate in treatment*	121	47(38.5%)	25(20.5%)	49(40.1%)
I believe that cultural factors are not relevant in terms of legal issues of clients*	121	88(73.0%)	19(15.6%)	14(11.5%)
I believe that a client's family should have the right to mediate with health professionals on behalf of the client	121	90(74.6%)	13(10.7%)	18(14.8%)

* Correct response to item-disagree

Frequency scores for core competency attitude subscale 9

Item	<i>n</i>	Correct	No opinion	Incorrect
I support the implementation of individual lifestyle planning for clients in accordance with the Treaty of Waitangi partnership principles	121	95(78.7%)	14(11.5%)	12(9.8%)
I support the implementation of family/whanau-inclusive mental health services	121	103(85.2%)	12(9.8%)	6(4.9%)
I believe the recovery approach is the optimal approach for mentally ill clients	121	83(68.9%)	24(19.7%)	14(11.5%)
I believe that consultation with local drug and alcohol agencies is an important part of my job	121	70(58.2%)	28(23.0%)	23(18.9%)

Frequency scores for core competency attitude subscale 10

Item	<i>n</i>	Correct	No opinion	Incorrect
I am not afraid to ask colleagues for help	121	113(93.4%)	5(4.1%)	3(2.5%)
I believe that I know as much as possible about my job*	121	92(76.2%)	8(6.6%)	21(17.2%)
I feel stupid asking supervisors for help*	121	78(64.8%)	41(33.6%)	2(1.6%)
I believe that feedback from my peers is useful in assessing my job	121	109(90.2%)	4(3.3%)	8(6.6%)
I believe that further education would not impact on the quality of my care for clients*	121	103(85.2%)	5(4.1%)	13(10.7%)
At this stage I believe that I no longer need clinical supervision*	121	103(85.2%)	12(9.8%)	6(4.9%)

* Correct response to item-disagree

Appendix J – Results of correlational analysis.

Correlations

		Skill demonstrate knowledge	Skill communication	Skill culture	Skill assessment
Skill demonstrate knowledge	Pearson Correlation	1.000	.411**	.212*	.343**
	Sig. (2-tailed)	.	.000	.019	.000
	N	122	122	122	122
Skill communication	Pearson Correlation	.411**	1.000	.433**	.574**
	Sig. (2-tailed)	.000	.	.000	.000
	N	122	122	122	122
Skill culture	Pearson Correlation	.212*	.433**	1.000	.385**
	Sig. (2-tailed)	.019	.000	.	.000
	N	122	122	122	122
Skill assessment	Pearson Correlation	.343**	.574**	.385**	1.000
	Sig. (2-tailed)	.000	.000	.000	.
	N	122	122	122	122
Skill intervention	Pearson Correlation	.288**	.453**	.390**	.481**
	Sig. (2-tailed)	.001	.000	.000	.000
	N	121	121	121	121
Skill records	Pearson Correlation	.094	.222*	.306**	.392**
	Sig. (2-tailed)	.304	.014	.001	.000
	N	121	121	121	121
Skill safe	Pearson Correlation	.417**	.257**	.381**	.368**
	Sig. (2-tailed)	.000	.004	.000	.000
	N	122	122	122	122
Skill legal	Pearson Correlation	.186*	.258**	.150	.237**
	Sig. (2-tailed)	.040	.004	.099	.008
	N	122	122	122	122
Skill promotion	Pearson Correlation	.099	.409**	.354**	.461**
	Sig. (2-tailed)	.278	.000	.000	.000
	N	122	122	122	122
Skill individual	Pearson Correlation	.242**	.485**	.426**	.427**
	Sig. (2-tailed)	.007	.000	.000	.000
	N	122	122	122	122
Attitude culture	Pearson Correlation	.037	.130	.159	.085
	Sig. (2-tailed)	.687	.154	.080	.354
	N	122	122	122	122
Attitude assessment	Pearson Correlation	.015	-.080	-.066	-.033
	Sig. (2-tailed)	.870	.383	.473	.720
	N	122	122	122	122
Attitude intervention	Pearson Correlation	.056	.116	.183*	.030
	Sig. (2-tailed)	.541	.205	.044	.743
	N	122	122	122	122
Attitude records	Pearson Correlation	.113	.211*	.107	.102
	Sig. (2-tailed)	.217	.020	.240	.264
	N	122	122	122	122
Attitude safe	Pearson Correlation	.071	.113	.203*	.045
	Sig. (2-tailed)	.436	.214	.025	.626
	N	122	122	122	122
Attitude legal	Pearson Correlation	.015	.114	.282**	.085
	Sig. (2-tailed)	.871	.210	.002	.352
	N	122	122	122	122
Attitude promotion	Pearson Correlation	.096	.062	.205*	.318**
	Sig. (2-tailed)	.292	.498	.023	.000
	N	122	122	122	122

Correlations

		Skill demonstrate knowledge	Skill communication	Skill culture	Skill assessment
Attitude individual	Pearson Correlation	.156	.283**	.199*	.168
	Sig. (2-tailed)	.086	.002	.028	.064
	N	122	122	122	122
Attitude demonstration	Pearson Correlation	.112	.276**	.180*	.223*
	Sig. (2-tailed)	.218	.002	.047	.014
	N	122	122	122	122
Attitude communication	Pearson Correlation	.216*	.319**	.287**	.252**
	Sig. (2-tailed)	.017	.000	.001	.005
	N	122	122	122	122
SUPPORT	Pearson Correlation	-.022	.179	.197	.013
	Sig. (2-tailed)	.857	.136	.099	.913
	N	71	71	71	71
AUTONOMY	Pearson Correlation	.145	.223	.244	-.097
	Sig. (2-tailed)	.248	.074	.050	.442
	N	65	65	65	65
INVOLVE	Pearson Correlation	-.054	.169	-.029	.029
	Sig. (2-tailed)	.649	.149	.806	.809
	N	74	74	74	74
SPONTAN	Pearson Correlation	.032	.092	.108	-.156
	Sig. (2-tailed)	.789	.443	.367	.192
	N	72	72	72	72
PRACTICA	Pearson Correlation	.076	.196	.223	.089
	Sig. (2-tailed)	.529	.101	.062	.459
	N	71	71	71	71
PERSONAL	Pearson Correlation	-.135	.153	.067	-.095
	Sig. (2-tailed)	.255	.196	.574	.422
	N	73	73	73	73
ANGERAND	Pearson Correlation	.094	.182	.077	.186
	Sig. (2-tailed)	.446	.138	.530	.128
	N	68	68	68	68
ORDERAND	Pearson Correlation	-.059	.000	.091	-.121
	Sig. (2-tailed)	.613	.997	.438	.299
	N	75	75	75	75
PROGRAM	Pearson Correlation	-.129	-.064	.138	-.053
	Sig. (2-tailed)	.280	.593	.249	.656
	N	72	72	72	72
STAFFCON	Pearson Correlation	-.063	-.269*	-.126	-.046
	Sig. (2-tailed)	.619	.030	.316	.719
	N	65	65	65	65
My date of birth	Pearson Correlation	-.130	-.130	-.053	-.025
	Sig. (2-tailed)	.179	.181	.588	.800
	N	108	108	108	108
How much schooling have you had	Pearson Correlation	.250**	.365**	.159	.187*
	Sig. (2-tailed)	.008	.000	.093	.047
	N	113	113	113	113
Years of experience as a mental health worker	Pearson Correlation	-.093	-.047	-.008	.158
	Sig. (2-tailed)	.333	.629	.933	.100
	N	110	110	110	110

Correlations

		Skill intervention	Skill records	Skill safe	Skill legal
Skill demonstrate knowledge	Pearson Correlation Sig. (2-tailed) N	.288** .001 121	.094 .304 121	.417** .000 122	.186* .040 122
Skill communication	Pearson Correlation Sig. (2-tailed) N	.453** .000 121	.222* .014 121	.257** .004 122	.258** .004 122
Skill culture	Pearson Correlation Sig. (2-tailed) N	.390** .000 121	.306** .001 121	.381** .000 122	.150 .099 122
Skill assessment	Pearson Correlation Sig. (2-tailed) N	.481** .000 121	.392** .000 121	.368** .000 122	.237** .008 122
Skill intervention	Pearson Correlation Sig. (2-tailed) N	1.000 .000 121	.169 .065 120	.521** .000 121	.201* .027 121
Skill records	Pearson Correlation Sig. (2-tailed) N	.169 .065 120	1.000 .000 121	.336** .000 121	.187* .040 121
Skill safe	Pearson Correlation Sig. (2-tailed) N	.521** .000 121	.336** .000 121	1.000 .000 122	.269** .003 122
Skill legal	Pearson Correlation Sig. (2-tailed) N	.201* .027 121	.187* .040 121	.269** .003 122	1.000 .000 122
Skill promotion	Pearson Correlation Sig. (2-tailed) N	.457** .000 121	.110 .228 121	.239** .008 122	.270** .003 122
Skill individual	Pearson Correlation Sig. (2-tailed) N	.550** .000 121	.307** .001 121	.417** .000 122	.295** .001 122
Attitude culture	Pearson Correlation Sig. (2-tailed) N	.079 .387 121	.033 .718 121	.072 .428 122	.174 .055 122
Attitude assessment	Pearson Correlation Sig. (2-tailed) N	-.014 .875 121	.015 .869 121	.022 .810 122	.032 .729 122
Attitude intervention	Pearson Correlation Sig. (2-tailed) N	.025 .785 121	-.026 .773 121	.014 .876 122	.176 .052 122
Attitude records	Pearson Correlation Sig. (2-tailed) N	.017 .856 121	-.057 .534 121	.049 .588 122	-.041 .653 122
Attitude safe	Pearson Correlation Sig. (2-tailed) N	.105 .254 121	.097 .291 121	.053 .559 122	.046 .615 122
Attitude legal	Pearson Correlation Sig. (2-tailed) N	.172 .060 121	.056 .544 121	.121 .184 122	.161 .076 122
Attitude promotion	Pearson Correlation Sig. (2-tailed) N	.105 .250 121	.019 .839 121	.104 .253 122	.209* .021 122

Correlations

		Skill intervention	Skill records	Skill safe	Skill legal
Attitude individual	Pearson Correlation	.267**	.072	.150	.134
	Sig. (2-tailed)	.003	.434	.098	.142
	N	121	121	122	122
Attitude demonstration	Pearson Correlation	.232*	.130	.166	.246**
	Sig. (2-tailed)	.010	.156	.067	.006
	N	121	121	122	122
Attitude communication	Pearson Correlation	.262**	.036	.188*	.352**
	Sig. (2-tailed)	.004	.693	.038	.000
	N	121	121	122	122
SUPPORT	Pearson Correlation	-.016	-.008	.051	.012
	Sig. (2-tailed)	.892	.947	.675	.923
	N	71	71	71	71
AUTONOMY	Pearson Correlation	.135	.076	.137	.134
	Sig. (2-tailed)	.289	.546	.278	.287
	N	64	65	65	65
INVOLVE	Pearson Correlation	.095	-.008	.041	.172
	Sig. (2-tailed)	.423	.948	.728	.142
	N	73	74	74	74
SPONTAN	Pearson Correlation	-.144	.001	.046	.111
	Sig. (2-tailed)	.228	.992	.700	.354
	N	72	72	72	72
PRACTICA	Pearson Correlation	.024	.165	-.008	.051
	Sig. (2-tailed)	.841	.170	.949	.672
	N	70	71	71	71
PERSONAL	Pearson Correlation	.174	-.002	-.003	.048
	Sig. (2-tailed)	.144	.985	.977	.687
	N	72	73	73	73
ANGERAND	Pearson Correlation	.100	.136	.016	.124
	Sig. (2-tailed)	.421	.269	.895	.314
	N	67	68	68	68
ORDERAND	Pearson Correlation	-.262*	.069	-.047	-.079
	Sig. (2-tailed)	.024	.554	.691	.503
	N	74	75	75	75
PROGRAM	Pearson Correlation	-.136	.068	-.079	-.044
	Sig. (2-tailed)	.257	.573	.512	.715
	N	71	72	72	72
STAFFCON	Pearson Correlation	-.253*	-.071	-.200	-.096
	Sig. (2-tailed)	.044	.572	.110	.445
	N	64	65	65	65
My date of birth	Pearson Correlation	.027	-.118	-.040	-.083
	Sig. (2-tailed)	.786	.224	.679	.396
	N	107	107	108	108
How much schooling have you had	Pearson Correlation	.186*	.109	.161	.107
	Sig. (2-tailed)	.050	.252	.088	.257
	N	112	112	113	113
Years of experience as a mental health worker	Pearson Correlation	.146	-.013	.025	.113
	Sig. (2-tailed)	.129	.891	.794	.239
	N	109	109	110	110

Correlations

		Skill promotion	Skill individual	Attitude culture	Attitude assessment
Skill demonstrate knowledge	Pearson Correlation	.099	.242**	.037	.015
	Sig. (2-tailed)	.278	.007	.687	.870
	N	122	122	122	122
Skill communication	Pearson Correlation	.409**	.485**	.130	-.080
	Sig. (2-tailed)	.000	.000	.154	.383
	N	122	122	122	122
Skill culture	Pearson Correlation	.354**	.426**	.159	-.066
	Sig. (2-tailed)	.000	.000	.080	.473
	N	122	122	122	122
Skill assessment	Pearson Correlation	.461**	.427**	.085	-.033
	Sig. (2-tailed)	.000	.000	.354	.720
	N	122	122	122	122
Skill intervention	Pearson Correlation	.457**	.550**	.079	-.014
	Sig. (2-tailed)	.000	.000	.387	.875
	N	121	121	121	121
Skill records	Pearson Correlation	.110	.307**	.033	.015
	Sig. (2-tailed)	.228	.001	.718	.869
	N	121	121	121	121
Skill safe	Pearson Correlation	.239**	.417**	.072	.022
	Sig. (2-tailed)	.008	.000	.428	.810
	N	122	122	122	122
Skill legal	Pearson Correlation	.270**	.295**	.174	.032
	Sig. (2-tailed)	.003	.001	.055	.729
	N	122	122	122	122
Skill promotion	Pearson Correlation	1.000	.536**	.098	.145
	Sig. (2-tailed)	.	.000	.284	.111
	N	122	122	122	122
Skill individual	Pearson Correlation	.536**	1.000	.245**	.081
	Sig. (2-tailed)	.000	.	.007	.375
	N	122	122	122	122
Attitude culture	Pearson Correlation	.098	.245**	1.000	.256**
	Sig. (2-tailed)	.284	.007	.	.004
	N	122	122	122	122
Attitude assessment	Pearson Correlation	.145	.081	.256**	1.000
	Sig. (2-tailed)	.111	.375	.004	.
	N	122	122	122	122
Attitude intervention	Pearson Correlation	.338**	.283**	.139	.286**
	Sig. (2-tailed)	.000	.002	.126	.001
	N	122	122	122	122
Attitude records	Pearson Correlation	.121	.102	.183*	.005
	Sig. (2-tailed)	.186	.265	.043	.954
	N	122	122	122	122
Attitude safe	Pearson Correlation	.143	.260**	.180*	-.009
	Sig. (2-tailed)	.116	.004	.048	.917
	N	122	122	122	122
Attitude legal	Pearson Correlation	.251**	.251**	.290**	.350**
	Sig. (2-tailed)	.005	.005	.001	.000
	N	122	122	122	122
Attitude promotion	Pearson Correlation	.423**	.263**	.298**	.241**
	Sig. (2-tailed)	.000	.003	.001	.007
	N	122	122	122	122

Correlations

		Skill promotion	Skill individual	Attitude culture	Attitude assessment
Attitude individual	Pearson Correlation	.263**	.540**	.273**	.062
	Sig. (2-tailed)	.003	.000	.002	.494
	N	122	122	122	122
Attitude demonstration	Pearson Correlation	.319**	.414**	.477**	.276**
	Sig. (2-tailed)	.000	.000	.000	.002
	N	122	122	122	122
Attitude communication	Pearson Correlation	.450**	.540**	.433**	.344**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	122	122	122	122
SUPPORT	Pearson Correlation	-.030	.112	.052	-.191
	Sig. (2-tailed)	.806	.353	.667	.110
	N	71	71	71	71
AUTONOMY	Pearson Correlation	.195	.289*	.281*	.001
	Sig. (2-tailed)	.120	.020	.023	.996
	N	65	65	65	65
INVOLVE	Pearson Correlation	.120	.202	-.049	-.049
	Sig. (2-tailed)	.309	.084	.677	.676
	N	74	74	74	74
SPONTAN	Pearson Correlation	-.107	-.055	.004	-.025
	Sig. (2-tailed)	.370	.649	.972	.832
	N	72	72	72	72
PRACTICA	Pearson Correlation	.137	.247*	-.071	-.103
	Sig. (2-tailed)	.254	.038	.558	.391
	N	71	71	71	71
PERSONAL	Pearson Correlation	.186	.232*	.021	.121
	Sig. (2-tailed)	.116	.049	.861	.309
	N	73	73	73	73
ANGERAND	Pearson Correlation	.023	.226	-.151	-.291*
	Sig. (2-tailed)	.853	.064	.220	.016
	N	68	68	68	68
ORDERAND	Pearson Correlation	.009	.014	-.101	-.136
	Sig. (2-tailed)	.942	.902	.386	.243
	N	75	75	75	75
PROGRAM	Pearson Correlation	.074	.029	-.055	-.104
	Sig. (2-tailed)	.539	.810	.643	.386
	N	72	72	72	72
STAFFCON	Pearson Correlation	-.235	-.202	-.168	.008
	Sig. (2-tailed)	.059	.106	.182	.948
	N	65	65	65	65
My date of birth	Pearson Correlation	.150	-.099	-.355**	-.147
	Sig. (2-tailed)	.121	.310	.000	.128
	N	108	108	108	108
How much schooling have you had	Pearson Correlation	.160	.319**	.194*	.148
	Sig. (2-tailed)	.090	.001	.040	.119
	N	113	113	113	113
Years of experience as a mental health worker	Pearson Correlation	.223*	.006	-.092	-.203*
	Sig. (2-tailed)	.019	.950	.339	.033
	N	110	110	110	110

Correlations

		Attitude intervention	Attitude records	Attitude safe	Attitude legal
Skill demonstrate knowledge	Pearson Correlation	.056	.113	.071	.015
	Sig. (2-tailed)	.541	.217	.436	.871
	N	122	122	122	122
Skill communication	Pearson Correlation	.116	.211*	.113	.114
	Sig. (2-tailed)	.205	.020	.214	.210
	N	122	122	122	122
Skill culture	Pearson Correlation	.183*	.107	.203*	.282**
	Sig. (2-tailed)	.044	.240	.025	.002
	N	122	122	122	122
Skill assessment	Pearson Correlation	.030	.102	.045	.085
	Sig. (2-tailed)	.743	.264	.626	.352
	N	122	122	122	122
Skill intervention	Pearson Correlation	.025	.017	.105	.172
	Sig. (2-tailed)	.785	.856	.254	.060
	N	121	121	121	121
Skill records	Pearson Correlation	-.026	-.057	.097	.056
	Sig. (2-tailed)	.773	.534	.291	.544
	N	121	121	121	121
Skill safe	Pearson Correlation	.014	.049	.053	.121
	Sig. (2-tailed)	.876	.588	.559	.184
	N	122	122	122	122
Skill legal	Pearson Correlation	.176	-.041	.046	.161
	Sig. (2-tailed)	.052	.653	.615	.076
	N	122	122	122	122
Skill promotion	Pearson Correlation	.338**	.121	.143	.251**
	Sig. (2-tailed)	.000	.186	.116	.005
	N	122	122	122	122
Skill individual	Pearson Correlation	.283**	.102	.260**	.251**
	Sig. (2-tailed)	.002	.265	.004	.005
	N	122	122	122	122
Attitude culture	Pearson Correlation	.139	.183*	.180*	.290**
	Sig. (2-tailed)	.126	.043	.048	.001
	N	122	122	122	122
Attitude assessment	Pearson Correlation	.286**	.005	-.009	.350**
	Sig. (2-tailed)	.001	.954	.917	.000
	N	122	122	122	122
Attitude intervention	Pearson Correlation	1.000	.215*	.185*	.337**
	Sig. (2-tailed)	.	.017	.041	.000
	N	122	122	122	122
Attitude records	Pearson Correlation	.215*	1.000	.077	.067
	Sig. (2-tailed)	.017	.	.398	.465
	N	122	122	122	122
Attitude safe	Pearson Correlation	.185*	.077	1.000	.132
	Sig. (2-tailed)	.041	.398	.	.147
	N	122	122	122	122
Attitude legal	Pearson Correlation	.337**	.067	.132	1.000
	Sig. (2-tailed)	.000	.465	.147	.
	N	122	122	122	122
Attitude promotion	Pearson Correlation	.272**	.157	-.053	.308**
	Sig. (2-tailed)	.002	.085	.561	.001
	N	122	122	122	122

Correlations

		Attitude intervention	Attitude records	Attitude safe	Attitude legal
Attitude individual	Pearson Correlation	.238**	.102	.337**	.247**
	Sig. (2-tailed)	.008	.262	.000	.006
	N	122	122	122	122
Attitude demonstration	Pearson Correlation	.375**	.237**	.147	.311**
	Sig. (2-tailed)	.000	.009	.106	.000
	N	122	122	122	122
Attitude communication	Pearson Correlation	.491**	.276**	.303**	.390**
	Sig. (2-tailed)	.000	.002	.001	.000
	N	122	122	122	122
SUPPORT	Pearson Correlation	-.169	.212	.066	-.268*
	Sig. (2-tailed)	.159	.076	.582	.024
	N	71	71	71	71
AUTONOMY	Pearson Correlation	-.115	.082	.173	-.086
	Sig. (2-tailed)	.362	.516	.169	.496
	N	65	65	65	65
INVOLVE	Pearson Correlation	.096	.223	.097	-.124
	Sig. (2-tailed)	.416	.056	.409	.294
	N	74	74	74	74
SPONTAN	Pearson Correlation	-.071	.188	.139	-.095
	Sig. (2-tailed)	.553	.114	.243	.426
	N	72	72	72	72
PRACTICA	Pearson Correlation	-.001	.161	.280*	-.066
	Sig. (2-tailed)	.990	.181	.018	.584
	N	71	71	71	71
PERSONAL	Pearson Correlation	.032	-.075	.061	-.169
	Sig. (2-tailed)	.788	.526	.609	.154
	N	73	73	73	73
ANGERAND	Pearson Correlation	-.143	.016	.074	-.252*
	Sig. (2-tailed)	.243	.895	.551	.038
	N	68	68	68	68
ORDERAND	Pearson Correlation	-.064	.196	.244*	-.279*
	Sig. (2-tailed)	.586	.092	.035	.015
	N	75	75	75	75
PROGRAM	Pearson Correlation	-.100	.090	.208	-.309**
	Sig. (2-tailed)	.405	.452	.079	.008
	N	72	72	72	72
STAFFCON	Pearson Correlation	-.090	-.068	-.135	-.156
	Sig. (2-tailed)	.476	.588	.285	.214
	N	65	65	65	65
My date of birth	Pearson Correlation	-.042	-.080	-.089	.068
	Sig. (2-tailed)	.667	.412	.360	.485
	N	108	108	108	108
How much schooling have you had	Pearson Correlation	.135	.129	.124	.178
	Sig. (2-tailed)	.153	.175	.190	.059
	N	113	113	113	113
Years of experience as a mental health worker	Pearson Correlation	-.127	-.106	-.159	.000
	Sig. (2-tailed)	.186	.271	.098	1.000
	N	110	110	110	110

Correlations

		Attitude promotion	Attitude individual	Attitude demonstration	Attitude communication
Skill demonstrate knowledge	Pearson Correlation	.096	.156	.112	.216*
	Sig. (2-tailed)	.292	.086	.218	.017
	N	122	122	122	122
Skill communication	Pearson Correlation	.062	.283**	.276**	.319**
	Sig. (2-tailed)	.498	.002	.002	.000
	N	122	122	122	122
Skill culture	Pearson Correlation	.205*	.199*	.180*	.287**
	Sig. (2-tailed)	.023	.028	.047	.001
	N	122	122	122	122
Skill assessment	Pearson Correlation	.318**	.168	.223*	.252**
	Sig. (2-tailed)	.000	.064	.014	.005
	N	122	122	122	122
Skill intervention	Pearson Correlation	.105	.267**	.232*	.262**
	Sig. (2-tailed)	.250	.003	.010	.004
	N	121	121	121	121
Skill records	Pearson Correlation	.019	.072	.130	.036
	Sig. (2-tailed)	.839	.434	.156	.693
	N	121	121	121	121
Skill safe	Pearson Correlation	.104	.150	.166	.188*
	Sig. (2-tailed)	.253	.098	.067	.038
	N	122	122	122	122
Skill legal	Pearson Correlation	.209*	.134	.246**	.352**
	Sig. (2-tailed)	.021	.142	.006	.000
	N	122	122	122	122
Skill promotion	Pearson Correlation	.423**	.263**	.319**	.450**
	Sig. (2-tailed)	.000	.003	.000	.000
	N	122	122	122	122
Skill individual	Pearson Correlation	.263**	.540**	.414**	.540**
	Sig. (2-tailed)	.003	.000	.000	.000
	N	122	122	122	122
Attitude culture	Pearson Correlation	.298**	.273**	.477**	.433**
	Sig. (2-tailed)	.001	.002	.000	.000
	N	122	122	122	122
Attitude assessment	Pearson Correlation	.241**	.062	.276**	.344**
	Sig. (2-tailed)	.007	.494	.002	.000
	N	122	122	122	122
Attitude intervention	Pearson Correlation	.272**	.238**	.375**	.491**
	Sig. (2-tailed)	.002	.008	.000	.000
	N	122	122	122	122
Attitude records	Pearson Correlation	.157	.102	.237**	.276**
	Sig. (2-tailed)	.085	.262	.009	.002
	N	122	122	122	122
Attitude safe	Pearson Correlation	-.053	.337**	.147	.303**
	Sig. (2-tailed)	.561	.000	.106	.001
	N	122	122	122	122
Attitude legal	Pearson Correlation	.308**	.247**	.311**	.390**
	Sig. (2-tailed)	.001	.006	.000	.000
	N	122	122	122	122
Attitude promotion	Pearson Correlation	1.000	.126	.284**	.347**
	Sig. (2-tailed)	.	.166	.002	.000
	N	122	122	122	122

Correlations

		Attitude promotion	Attitude individual	Attitude demonstration	Attitude communication
Attitude individual	Pearson Correlation	.126	1.000	.209*	.431**
	Sig. (2-tailed)	.166	.	.021	.000
	N	122	122	122	122
Attitude demonstration	Pearson Correlation	.284**	.209*	1.000	.573**
	Sig. (2-tailed)	.002	.021	.	.000
	N	122	122	122	122
Attitude communication	Pearson Correlation	.347**	.431**	.573**	1.000
	Sig. (2-tailed)	.000	.000	.000	.
	N	122	122	122	122
SUPPORT	Pearson Correlation	-.063	-.043	.140	-.052
	Sig. (2-tailed)	.600	.721	.245	.666
	N	71	71	71	71
AUTONOMY	Pearson Correlation	.012	.129	.306*	.186
	Sig. (2-tailed)	.926	.305	.013	.139
	N	65	65	65	65
INVOLVE	Pearson Correlation	.105	.077	.113	.144
	Sig. (2-tailed)	.375	.514	.337	.220
	N	74	74	74	74
SPONTAN	Pearson Correlation	.092	.062	.064	.047
	Sig. (2-tailed)	.442	.604	.591	.695
	N	72	72	72	72
PRACTICA	Pearson Correlation	.028	-.022	-.038	.013
	Sig. (2-tailed)	.814	.854	.755	.912
	N	71	71	71	71
PERSONAL	Pearson Correlation	-.005	.147	.128	.157
	Sig. (2-tailed)	.965	.215	.279	.185
	N	73	73	73	73
ANGERAND	Pearson Correlation	-.094	.102	-.148	-.127
	Sig. (2-tailed)	.447	.408	.230	.302
	N	68	68	68	68
ORDERAND	Pearson Correlation	-.105	-.248*	-.085	-.077
	Sig. (2-tailed)	.372	.032	.466	.513
	N	75	75	75	75
PROGRAM	Pearson Correlation	.073	-.100	-.127	-.034
	Sig. (2-tailed)	.544	.402	.288	.777
	N	72	72	72	72
STAFFCON	Pearson Correlation	.132	-.074	-.315*	-.177
	Sig. (2-tailed)	.296	.559	.011	.159
	N	65	65	65	65
My date of birth	Pearson Correlation	.007	.065	-.302**	-.307**
	Sig. (2-tailed)	.940	.506	.001	.001
	N	108	108	108	108
How much schooling have you had	Pearson Correlation	.128	.253**	.405**	.382**
	Sig. (2-tailed)	.176	.007	.000	.000
	N	113	113	113	113
Years of experience as a mental health worker	Pearson Correlation	.038	-.003	-.114	-.098
	Sig. (2-tailed)	.692	.976	.235	.307
	N	110	110	110	110

Correlations

		SUPPORT	AUTONOMY	INVOLVE	SPONTAN
Skill demonstrate knowledge	Pearson Correlation	-.022	.145	-.054	.032
	Sig. (2-tailed)	.857	.248	.649	.789
	N	71	65	74	72
Skill communication	Pearson Correlation	.179	.223	.169	.092
	Sig. (2-tailed)	.136	.074	.149	.443
	N	71	65	74	72
Skill culture	Pearson Correlation	.197	.244	-.029	.108
	Sig. (2-tailed)	.099	.050	.806	.367
	N	71	65	74	72
Skill assessment	Pearson Correlation	.013	-.097	.029	-.156
	Sig. (2-tailed)	.913	.442	.809	.192
	N	71	65	74	72
Skill intervention	Pearson Correlation	-.016	.135	.095	-.144
	Sig. (2-tailed)	.892	.289	.423	.228
	N	71	64	73	72
Skill records	Pearson Correlation	-.008	.076	-.008	.001
	Sig. (2-tailed)	.947	.546	.948	.992
	N	71	65	74	72
Skill safe	Pearson Correlation	.051	.137	.041	.046
	Sig. (2-tailed)	.675	.278	.728	.700
	N	71	65	74	72
Skill legal	Pearson Correlation	.012	.134	.172	.111
	Sig. (2-tailed)	.923	.287	.142	.354
	N	71	65	74	72
Skill promotion	Pearson Correlation	-.030	.195	.120	-.107
	Sig. (2-tailed)	.806	.120	.309	.370
	N	71	65	74	72
Skill individual	Pearson Correlation	.112	.289*	.202	-.055
	Sig. (2-tailed)	.353	.020	.084	.649
	N	71	65	74	72
Attitude culture	Pearson Correlation	.052	.281*	-.049	.004
	Sig. (2-tailed)	.667	.023	.677	.972
	N	71	65	74	72
Attitude assessment	Pearson Correlation	-.191	.001	-.049	-.025
	Sig. (2-tailed)	.110	.996	.676	.832
	N	71	65	74	72
Attitude intervention	Pearson Correlation	-.169	-.115	.096	-.071
	Sig. (2-tailed)	.159	.362	.416	.553
	N	71	65	74	72
Attitude records	Pearson Correlation	.212	.082	.223	.188
	Sig. (2-tailed)	.076	.516	.056	.114
	N	71	65	74	72
Attitude safe	Pearson Correlation	.066	.173	.097	.139
	Sig. (2-tailed)	.582	.169	.409	.243
	N	71	65	74	72
Attitude legal	Pearson Correlation	-.268*	-.086	-.124	-.095
	Sig. (2-tailed)	.024	.496	.294	.426
	N	71	65	74	72
Attitude promotion	Pearson Correlation	-.063	.012	.105	.092
	Sig. (2-tailed)	.600	.926	.375	.442
	N	71	65	74	72

Correlations

		SUPPORT	AUTONOMY	INVOLVE	SPONTAN
Attitude individual	Pearson Correlation	-.043	.129	.077	.062
	Sig. (2-tailed)	.721	.305	.514	.604
	N	71	65	74	72
Attitude demonstration	Pearson Correlation	.140	.306*	.113	.064
	Sig. (2-tailed)	.245	.013	.337	.591
	N	71	65	74	72
Attitude communication	Pearson Correlation	-.052	.186	.144	.047
	Sig. (2-tailed)	.666	.139	.220	.695
	N	71	65	74	72
SUPPORT	Pearson Correlation	1.000	.615**	.530**	.549**
	Sig. (2-tailed)	.	.000	.000	.000
	N	71	56	65	63
AUTONOMY	Pearson Correlation	.615**	1.000	.363**	.554**
	Sig. (2-tailed)	.000	.	.004	.000
	N	56	65	61	59
INVOLVE	Pearson Correlation	.530**	.363**	1.000	.477**
	Sig. (2-tailed)	.000	.004	.	.000
	N	65	61	74	68
SPONTAN	Pearson Correlation	.549**	.554**	.477**	1.000
	Sig. (2-tailed)	.000	.000	.000	.
	N	63	59	68	72
PRACTICA	Pearson Correlation	.356**	.240	.411**	.254*
	Sig. (2-tailed)	.005	.067	.001	.046
	N	61	59	65	62
PERSONAL	Pearson Correlation	.491**	.408**	.524**	.414**
	Sig. (2-tailed)	.000	.001	.000	.001
	N	63	58	66	65
ANGERAND	Pearson Correlation	.250	.122	.189	.362**
	Sig. (2-tailed)	.056	.371	.142	.004
	N	59	56	62	63
ORDERAND	Pearson Correlation	.498**	.169	.386**	.316*
	Sig. (2-tailed)	.000	.200	.001	.011
	N	63	59	67	64
PROGRAM	Pearson Correlation	.544**	.358**	.468**	.504**
	Sig. (2-tailed)	.000	.005	.000	.000
	N	63	61	66	64
STAFFCON	Pearson Correlation	-.054	-.361**	-.031	-.339*
	Sig. (2-tailed)	.696	.009	.821	.014
	N	54	51	55	52
My date of birth	Pearson Correlation	.019	-.166	.096	-.227
	Sig. (2-tailed)	.884	.221	.447	.071
	N	61	56	65	64
How much schooling have you had	Pearson Correlation	.079	.246	.042	.225
	Sig. (2-tailed)	.530	.058	.735	.068
	N	66	60	69	67
Years of experience as a mental health worker	Pearson Correlation	-.008	-.045	-.072	-.192
	Sig. (2-tailed)	.948	.739	.565	.126
	N	63	58	66	65

Correlations

		PRACTICA	PERSONAL	ANGERAND	ORDERAND
Skill demonstrate knowledge	Pearson Correlation	.076	-.135	.094	-.059
	Sig. (2-tailed)	.529	.255	.446	.613
	N	71	73	68	75
Skill communication	Pearson Correlation	.196	.153	.182	.000
	Sig. (2-tailed)	.101	.196	.138	.997
	N	71	73	68	75
Skill culture	Pearson Correlation	.223	.067	.077	.091
	Sig. (2-tailed)	.062	.574	.530	.438
	N	71	73	68	75
Skill assessment	Pearson Correlation	.089	-.095	.186	-.121
	Sig. (2-tailed)	.459	.422	.128	.299
	N	71	73	68	75
Skill intervention	Pearson Correlation	.024	.174	.100	-.262*
	Sig. (2-tailed)	.841	.144	.421	.024
	N	70	72	67	74
Skill records	Pearson Correlation	.165	-.002	.136	.069
	Sig. (2-tailed)	.170	.985	.269	.554
	N	71	73	68	75
Skill safe	Pearson Correlation	-.008	-.003	.016	-.047
	Sig. (2-tailed)	.949	.977	.895	.691
	N	71	73	68	75
Skill legal	Pearson Correlation	.051	.048	.124	-.079
	Sig. (2-tailed)	.672	.687	.314	.503
	N	71	73	68	75
Skill promotion	Pearson Correlation	.137	.186	.023	.009
	Sig. (2-tailed)	.254	.116	.853	.942
	N	71	73	68	75
Skill individual	Pearson Correlation	.247*	.232*	.226	.014
	Sig. (2-tailed)	.038	.049	.064	.902
	N	71	73	68	75
Attitude culture	Pearson Correlation	-.071	.021	-.151	-.101
	Sig. (2-tailed)	.558	.861	.220	.386
	N	71	73	68	75
Attitude assessment	Pearson Correlation	-.103	.121	-.291*	-.136
	Sig. (2-tailed)	.391	.309	.016	.243
	N	71	73	68	75
Attitude intervention	Pearson Correlation	-.001	.032	-.143	-.064
	Sig. (2-tailed)	.990	.788	.243	.586
	N	71	73	68	75
Attitude records	Pearson Correlation	.161	-.075	.016	.196
	Sig. (2-tailed)	.181	.526	.895	.092
	N	71	73	68	75
Attitude safe	Pearson Correlation	.280*	.061	.074	.244*
	Sig. (2-tailed)	.018	.609	.551	.035
	N	71	73	68	75
Attitude legal	Pearson Correlation	-.066	-.169	-.252*	-.279*
	Sig. (2-tailed)	.584	.154	.038	.015
	N	71	73	68	75
Attitude promotion	Pearson Correlation	.028	-.005	-.094	-.105
	Sig. (2-tailed)	.814	.965	.447	.372
	N	71	73	68	75

Correlations

		PRACTICA	PERSONAL	ANGERAND	ORDERAND
Attitude individual	Pearson Correlation	-.022	.147	.102	-.248*
	Sig. (2-tailed)	.854	.215	.408	.032
	N	71	73	68	75
Attitude demonstration	Pearson Correlation	-.038	.128	-.148	-.085
	Sig. (2-tailed)	.755	.279	.230	.466
	N	71	73	68	75
Attitude communication	Pearson Correlation	.013	.157	-.127	-.077
	Sig. (2-tailed)	.912	.185	.302	.513
	N	71	73	68	75
SUPPORT	Pearson Correlation	.356**	.491**	.250	.498**
	Sig. (2-tailed)	.005	.000	.056	.000
	N	61	63	59	63
AUTONOMY	Pearson Correlation	.240	.408**	.122	.169
	Sig. (2-tailed)	.067	.001	.371	.200
	N	59	58	56	59
INVOLVE	Pearson Correlation	.411**	.524**	.189	.386**
	Sig. (2-tailed)	.001	.000	.142	.001
	N	65	66	62	67
SPONTAN	Pearson Correlation	.254*	.414**	.362**	.316*
	Sig. (2-tailed)	.046	.001	.004	.011
	N	62	65	63	64
PRACTICA	Pearson Correlation	1.000	.237	.315*	.294*
	Sig. (2-tailed)	.	.059	.013	.020
	N	71	64	61	62
PERSONAL	Pearson Correlation	.237	1.000	.250*	.174
	Sig. (2-tailed)	.059	.	.047	.165
	N	64	73	64	65
ANGERAND	Pearson Correlation	.315*	.250*	1.000	.098
	Sig. (2-tailed)	.013	.047	.	.451
	N	61	64	68	62
ORDERAND	Pearson Correlation	.294*	.174	.098	1.000
	Sig. (2-tailed)	.020	.165	.451	.
	N	62	65	62	75
PROGRAM	Pearson Correlation	.412**	.347**	.296*	.557**
	Sig. (2-tailed)	.001	.004	.019	.000
	N	66	66	63	67
STAFFCON	Pearson Correlation	.020	-.013	.037	.179
	Sig. (2-tailed)	.880	.926	.792	.191
	N	58	58	53	55
My date of birth	Pearson Correlation	.036	.002	-.010	-.015
	Sig. (2-tailed)	.780	.987	.940	.906
	N	61	67	61	66
How much schooling have you had	Pearson Correlation	.002	.035	.161	-.032
	Sig. (2-tailed)	.990	.775	.205	.792
	N	66	70	64	69
Years of experience as a mental health worker	Pearson Correlation	-.089	-.108	.245	-.121
	Sig. (2-tailed)	.485	.384	.052	.328
	N	64	67	63	67

Correlations

		PROGRAM	STAFFCON	My date of birth
Skill demonstrate knowledge	Pearson Correlation	-.129	-.063	-.130
	Sig. (2-tailed)	.280	.619	.179
	N	72	65	108
Skill communication	Pearson Correlation	-.064	-.269*	-.130
	Sig. (2-tailed)	.593	.030	.181
	N	72	65	108
Skill culture	Pearson Correlation	.138	-.126	-.053
	Sig. (2-tailed)	.249	.316	.588
	N	72	65	108
Skill assessment	Pearson Correlation	-.053	-.046	-.025
	Sig. (2-tailed)	.656	.719	.800
	N	72	65	108
Skill intervention	Pearson Correlation	-.136	-.253*	.027
	Sig. (2-tailed)	.257	.044	.786
	N	71	64	107
Skill records	Pearson Correlation	.068	-.071	-.118
	Sig. (2-tailed)	.573	.572	.224
	N	72	65	107
Skill safe	Pearson Correlation	-.079	-.200	-.040
	Sig. (2-tailed)	.512	.110	.679
	N	72	65	108
Skill legal	Pearson Correlation	-.044	-.096	-.083
	Sig. (2-tailed)	.715	.445	.396
	N	72	65	108
Skill promotion	Pearson Correlation	.074	-.235	.150
	Sig. (2-tailed)	.539	.059	.121
	N	72	65	108
Skill individual	Pearson Correlation	.029	-.202	-.099
	Sig. (2-tailed)	.810	.106	.310
	N	72	65	108
Attitude culture	Pearson Correlation	-.055	-.168	-.355**
	Sig. (2-tailed)	.643	.182	.000
	N	72	65	108
Attitude assessment	Pearson Correlation	-.104	.008	-.147
	Sig. (2-tailed)	.386	.948	.128
	N	72	65	108
Attitude intervention	Pearson Correlation	-.100	-.090	-.042
	Sig. (2-tailed)	.405	.476	.667
	N	72	65	108
Attitude records	Pearson Correlation	.090	-.068	-.080
	Sig. (2-tailed)	.452	.588	.412
	N	72	65	108
Attitude safe	Pearson Correlation	.208	-.135	-.089
	Sig. (2-tailed)	.079	.285	.360
	N	72	65	108
Attitude legal	Pearson Correlation	-.309**	-.156	.068
	Sig. (2-tailed)	.008	.214	.485
	N	72	65	108
Attitude promotion	Pearson Correlation	.073	.132	.007
	Sig. (2-tailed)	.544	.296	.940
	N	72	65	108

Correlations

		PROGRAM	STAFFCON	My date of birth
Attitude individual	Pearson Correlation	-.100	-.074	.065
	Sig. (2-tailed)	.402	.559	.506
	N	72	65	108
Attitude demonstration	Pearson Correlation	-.127	-.315*	-.302**
	Sig. (2-tailed)	.288	.011	.001
	N	72	65	108
Attitude communication	Pearson Correlation	-.034	-.177	-.307**
	Sig. (2-tailed)	.777	.159	.001
	N	72	65	108
SUPPORT	Pearson Correlation	.544**	-.054	.019
	Sig. (2-tailed)	.000	.696	.884
	N	63	54	61
AUTONOMY	Pearson Correlation	.358**	-.361**	-.166
	Sig. (2-tailed)	.005	.009	.221
	N	61	51	56
INVOLVE	Pearson Correlation	.468**	-.031	.096
	Sig. (2-tailed)	.000	.821	.447
	N	66	55	65
SPONTAN	Pearson Correlation	.504**	-.339*	-.227
	Sig. (2-tailed)	.000	.014	.071
	N	64	52	64
PRACTICA	Pearson Correlation	.412**	.020	.036
	Sig. (2-tailed)	.001	.880	.780
	N	66	58	61
PERSONAL	Pearson Correlation	.347**	-.013	.002
	Sig. (2-tailed)	.004	.926	.987
	N	66	58	67
ANGERAND	Pearson Correlation	.296*	.037	-.010
	Sig. (2-tailed)	.019	.792	.940
	N	63	53	61
ORDERAND	Pearson Correlation	.557**	.179	-.015
	Sig. (2-tailed)	.000	.191	.906
	N	67	55	66
PROGRAM	Pearson Correlation	1.000	.249	.048
	Sig. (2-tailed)	.	.062	.705
	N	72	57	64
STAFFCON	Pearson Correlation	.249	1.000	.169
	Sig. (2-tailed)	.062	.	.209
	N	57	65	57
My date of birth	Pearson Correlation	.048	.169	1.000
	Sig. (2-tailed)	.705	.209	.
	N	64	57	108
How much schooling have you had	Pearson Correlation	.066	-.157	-.284**
	Sig. (2-tailed)	.598	.226	.003
	N	67	61	106
Years of experience as a mental health worker	Pearson Correlation	.051	.062	.393**
	Sig. (2-tailed)	.688	.639	.000
	N	65	59	104

Correlations

		How much schooling have you had	Years of experience as a mental health worker
Skill demonstrate knowledge	Pearson Correlation Sig. (2-tailed) N	.250** .008 113	-.093 .333 110
Skill communication	Pearson Correlation Sig. (2-tailed) N	.365** .000 113	-.047 .629 110
Skill culture	Pearson Correlation Sig. (2-tailed) N	.159 .093 113	-.008 .933 110
Skill assessment	Pearson Correlation Sig. (2-tailed) N	.187* .047 113	.158 .100 110
Skill intervention	Pearson Correlation Sig. (2-tailed) N	.186* .050 112	.146 .129 109
Skill records	Pearson Correlation Sig. (2-tailed) N	.109 .252 112	-.013 .891 109
Skill safe	Pearson Correlation Sig. (2-tailed) N	.161 .088 113	.025 .794 110
Skill legal	Pearson Correlation Sig. (2-tailed) N	.107 .257 113	.113 .239 110
Skill promotion	Pearson Correlation Sig. (2-tailed) N	.160 .090 113	.223* .019 110
Skill individual	Pearson Correlation Sig. (2-tailed) N	.319** .001 113	.006 .950 110
Attitude culture	Pearson Correlation Sig. (2-tailed) N	.194* .040 113	-.092 .339 110
Attitude assessment	Pearson Correlation Sig. (2-tailed) N	.148 .119 113	-.203* .033 110
Attitude intervention	Pearson Correlation Sig. (2-tailed) N	.135 .153 113	-.127 .186 110
Attitude records	Pearson Correlation Sig. (2-tailed) N	.129 .175 113	-.106 .271 110
Attitude safe	Pearson Correlation Sig. (2-tailed) N	.124 .190 113	-.159 .098 110
Attitude legal	Pearson Correlation Sig. (2-tailed) N	.178 .059 113	.000 1.000 110
Attitude promotion	Pearson Correlation Sig. (2-tailed) N	.128 .176 113	.038 .692 110

Correlations

		How much schooling have you had	Years of experience as a mental health worker
Attitude individual	Pearson Correlation	.253**	-.003
	Sig. (2-tailed)	.007	.976
	N	113	110
Attitude demonstration	Pearson Correlation	.405**	-.114
	Sig. (2-tailed)	.000	.235
	N	113	110
Attitude communication	Pearson Correlation	.382**	-.098
	Sig. (2-tailed)	.000	.307
	N	113	110
SUPPORT	Pearson Correlation	.079	-.008
	Sig. (2-tailed)	.530	.948
	N	66	63
AUTONOMY	Pearson Correlation	.246	-.045
	Sig. (2-tailed)	.058	.739
	N	60	58
INVOLVE	Pearson Correlation	.042	-.072
	Sig. (2-tailed)	.735	.565
	N	69	66
SPONTAN	Pearson Correlation	.225	-.192
	Sig. (2-tailed)	.068	.126
	N	67	65
PRACTICA	Pearson Correlation	.002	-.089
	Sig. (2-tailed)	.990	.485
	N	66	64
PERSONAL	Pearson Correlation	.035	-.108
	Sig. (2-tailed)	.775	.384
	N	70	67
ANGERAND	Pearson Correlation	.161	.245
	Sig. (2-tailed)	.205	.052
	N	64	63
ORDERAND	Pearson Correlation	-.032	-.121
	Sig. (2-tailed)	.792	.328
	N	69	67
PROGRAM	Pearson Correlation	.066	.051
	Sig. (2-tailed)	.598	.688
	N	67	65
STAFFCON	Pearson Correlation	-.157	.062
	Sig. (2-tailed)	.226	.639
	N	61	59
My date of birth	Pearson Correlation	-.284**	.393**
	Sig. (2-tailed)	.003	.000
	N	106	104
How much schooling have you had	Pearson Correlation	1.000	-.082
	Sig. (2-tailed)	.	.400
	N	113	108
Years of experience as a mental health worker	Pearson Correlation	-.082	1.000
	Sig. (2-tailed)	.400	.
	N	108	110

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).